

09/267, 199

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<120> Nucleic Acid Molecules And Other Molecules Associated With The
Tocopherol Pathway

<130> 04983.0024.US01/38-21(15092)B

<150> US 60/078,031

<151> 1998-03-16

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gaaccaaggt cagatggttt tgaggagcgg gatggattga agttgccaaag ctatagaggg 180
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ataagggcgt ac 252

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gaggatgcgg cggtcgctcg tggcgtctgg gctcggcggc agcatcttgc ccttgccgcc 180
ctttggcttt tgatgtcttg cacgctggct gtgtgcatgc aggggtgcagt gcaggggtgt 240
ggtaggagaa tcttacgttg tcgtttgcct tgctatgtag tatgtaa 287

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<211> 268

<212> DNA

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<400> 4

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cctcgtcgcc tttgtacacg aaccagctgg gttccattcc atcaatgggt caaaaagcac 180
aactaggttc actgtcaagg actagtcctt gggttttggt tcagctgctg tgtcaaactt 240
tgctggcatg cactggtaaa ctagatag 268

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<211> 341

<212> DNA

<213> Zea mays

<400> 5

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aagactccac cagtggcctt ttctacgatt gttcggccca catgctgtgg gttggtgagc 120
gcactcgtca actcgatgga gcgcatgttg aattccttcg tgggtgttgc aatcctcttg 180
gcataaaggt gagcgacaaa atgaacccca gtgacttggg gaagctgatt gagattctga 240
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gagtgaagtt gcctcatctc atccgtgctg ttcgcaatgc t 341

<210> 6

<211> 299
 <212> DNA
 <213> Zea mays

<400> 6

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 acaactcgat ggagctcatg ttgaattcct cctgtgtgtt gccaaccttc tgggcataaa 120
 ggtgagcgac aaaatgaacc ccagtgaagt ggtgaagctg attgatattc tgaacccttc 180
 aaacaaacct ggaaggatca ccataattac aaggatgggg gcagagaaca tgaggggtgaa 240
 gttgcctcat ctcacccgtg ctgttcgcaa tgctggactg attgtcacat ggattactg 299

<210> 7
 <211> 269
 <212> DNA
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<400> 7

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 attctgaacc cttcaaaca accctggaagg atcaccataa ttacaaggat gggggcagag 180
 aacatggagt gaagttgcct catctcatcc gtgctgttcg caatgctgga ttaattgtca 240
 catggattac tgatcctatg catggaac 269

<210> 8
 <211> 310
 <212> DNA
 <213> Zea mays

<400> 8

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 gattgttcgg cccacatgct gtgggttggt gagcgactc gtcaactcga tggagcgcat 180
 gttgaattcc ttcgtggtgt tgccaatcct cttggcataa agtgagcgac aaaatgaacc 240
 ccagtgactt ggtgaagctg attgagattc tgaacccttc taacaaacct ggaaggatca 300
 ccataattac 310

<210> 9
 <211> 292
 <212> DNA
 <213> Zea mays

 <400> 9

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 gccacatgt tgtgggttg tgagcgact cgacaactcg atggagctca tgttgaattc 180
 ctccgtggtg ttgccaaccc tctgggcata aaggtgagcg acaaaatgaa cccagtgag 240
 ttggtgaagc tgattgatat tctgaaccct tcaaacaac ctggaaggat ca 292

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 <211> 332
 <212> DNA
 <213> Zea mays

 <400> 10

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 cttggcataa aggtgagcga caaaatgaac cccagtgact tggatgaagct gattgagatt 120
 ctgaaccctt caaacaacc tggaaggatc accataatta caaggatggg ggcagagaac 180
 atgagagtga agttgcctca tctcatccgt gctgttcgca atgctggatt aattgtcaca 240
 tggattactg atcctatgca tggaaacacc atcaaggcgc cttgtggcct gaagactcgt 300
 ccattcgact caattctggc tgaagtgcgc gc 332

<210> 11
 <211> 277
 <212> DNA
 <213> Zea mays

 <400> 11

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 cctcttggca taaaggtgag cgacaaaatg aaccocagtg acttggtgaa gctgattgag 120
 attctgaacc cttcaaacaac acctggaagg atcaccataa ttacaaggat gggggcagag 180
 aacatgagag tgaagttgcc tcatctcact cgtgctgttc gcaatgctgg attaattgtc 240

acatggatta ctgacccat gcacggaaac accatca

277

<210> 12
<211> 272
<212> DNA
<213> Zea mays

<400> 12

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ttccagcagt ggccttttct atgattgttc ggcccagatg ttgtgggttg gtgagcgac 120

tcgacaactc gatggagctc atgttgaatt cctccgttgt gttgccaagc ctctgggcat 180

aaagggtgagc gagaaaatga agccgagtga gttggtgaag ctgattgata gtctgaaccc 240

ttgaaacaaa gctggaagga tcagcatatt ac 272

<210> 13
<211> 218
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<400> 13

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aattccttcg tgggtgttgcc aatcctcttg gcataaaggt gagcgacaaa atgaacccca 120

gtgacttggt gaagctgatt gagattctga acccttcaaa caaacctgga aggatcaccn 180

ataatacaag gactggggca gagaacanta gagtgtaa 218

<210> 14
<211> 227
<212> DNA
<213> Zea mays

<400> 14

acatgttgtg ggttgggtgag cgcactcgac aactcgatgg agctcatgtt gaattcctcc 60

gtggtgttgc caaccctctg ggcataaagg tgagcgacaa aatgaacccc agtgagttgg 120

tgaagctgat tgatattctg aacccttcaa acaaacctgg aaggatcacc ataattacaa 180

ggatgggggc agagaacatg aggggtgaagt tgcctcatct catccgt 227

<210> 15
 <211> 267
 <212> DNA
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<400> 15

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 atgtagcgca tgttgaattc cttcgtgggtg ttgccaatcc tcttggcata aagggtgagcg 180
 acaaaatgaa cccagtgac ttggtgaagc tgattgagat tctgaaccct tcaaacaaac 240
 ctggaaggat caccataatt acaagga 267

<210> 16
 <211> 309
 <212> DNA
 <213> Zea mays

<400> 16

aaattggccc ataggggtgga tgaggctctt gggttcatga ctgcagcagg gcttacagtt 60
 gaccacccga taatgacgac tactgacttc tggacctcgc acgagtgcct tctcttacct 120
 tacgagcagt ctcttacctg taaagactcc accagtggcc ttttctacga ttgttcggcc 180
 cacatgttgt gggttgggtga gcgcactcgt caactcgatg gagcgcatgt tgaattcctc 240
 cgtggtgttg ccaacctctt tggcataaag gcgagcgaca aaatgaacct cagtgacttg 300
 gtgaagctg 309

<210> 17
 <211> 296
 <212> DNA
 <213> Zea mays

<400> 17

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 gttcgcaatg ctggactgat tgtcacatgg attactgatc ctatgcatgg aaacaccatc 120
 aaggccccct gtggcctgaa gactcgtcca tttgactcca ttctggctga agtgcgtgcc 180
 ttcttcgatg tgcatgacca agaaggaagc caccctgggg gcgtccacct tgaaatgact 240
 gggcagaacg tgaccgagtg catcggtgga tcacggaccg tgaccttoga cgatct 296

<210> 18
 <211> 272
 <212> DNA
 <213> Zea mays

<400> 18

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 gaagtgcgcg cattcttcga cgtgcatgat caagaaggaa gtcacccagg aggcattccac 120
 cttgaaatga ctgggcagaa cgtgaccgag tgcattggtg gatcacggac tgtgaccttc 180
 gatgacctta gtgaccgcta ccacacccac tgtgacccaa ggctgaacgc ctcccagtcc 240
 ctggagctcg ccttcattcat tgcagagagg ct 272

<210> 19
 <211> 328
 <212> DNA
 <213> Zea mays

<400> 19

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 aataggccca taggggtggat gatgctcttg ggttcatgac tgcacgaggg cttacagtcg 120
 accacccgat aatgacgact actgacttct ggacctcgca cgagtgcctt ctcttaccct 180
 acgagcaggc tcttaccctg gaggattcca ccagtggcct tttctatgat tgttcggccc 240
 acatgttgtg ggttggtgag cgcactcgac aactcgatgg agctcatggt gaattcctcc 300
 gtggtgttgc caaccctctg ggcataaa 328

<210> 20
 <211> 265
 <212> DNA
 <213> Zea mays

<400> 20

gggttcatga ctgcagcagg gcttacagtt gaccacccga taatgacgac tactgacttc 60
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 accagtggcc ttttctacga ttgttcggcc cacatgttgt gggttggtga gcgcactcgt 180
 caactcgatg gagcgcagt tgaattcctc cgttgtgttg ccaaccctct tggcataaag 240

gtgagcgaca aaatgaaccc cagtg

265

<210> 21
<211> 232
<212> DNA
<213> Zea mays

<400> 21

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cgagcagtct cttacccgta aagactccac cagtggcctt ttctacgatt gttcggccca 120
catgttgtgg gttggtgagc gcactcgtca actcgatgga gcgcatgttg aattcctccg 180
tgggtgttggc aaccctcttg gcataaaggt gagcgacaaa atgaacccca gt 232

<210> 22
<211> 320
<212> DNA
<213> Zea mays

<400> 22

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acgagtgcct tctcttacct tacgagcagg ctcttacctg tgaggattcc accagtggcc 180
ttttctatga ttgttcggcc cacatgttgt gggttggtga gcgcactcga caactcgatg 240
gagctcatgt tgaattcctc cgtggtgttg ccaaccctct gggcataaag gtgagcgaca 300
aaatgaaccc cagtgagttg 320

<210> 23
<211> 309
<212> DNA
<213> Zea mays

<400> 23

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agagaacatg aggggtgaagt tgcctcatct catccgtgct gttcgcaatg ctggactgat 180
tgtcacatgg attactgatc ctatgcatgg aaacaccatc aaggcccctt gtggcctgaa 240

gactcgtcca ttgactcca ttctggctga agtgcgtgcc ttcttcgatg tgcattgacca 300
agaaggaag 309

<210> 24
<211> 336
<212> DNA
<213> Zea mays

<400> 24

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catcaaggcc ccttgtggtc tgaagactcg tccattcgac tcaattctgg ctgaagtgcg 120
cgcatctctc gacgtgcatg atcaagaagg aagtcaccca ggaggcatcc accttgaaat 180
gactgggcag aacgtgaccg agtgcattgg tggatcacgg actgtgacct tcgatgacct 240
tagtgaccgc taccacaccc actgtgaccc aatgctgaac gcctcccagt ccttgagact 300
cgccttcattc attgcagaga gtcaggaaga ggaggt 336

<210> 25
<211> 303
<212> DNA
<213> Zea mays

<400> 25

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atgactgcag cagggcttac agttgaccac ccgataatga cgactactga cttctggacc 120
tcgcacgagt gccttctctt acctacgag cagtctctta cccgtaaaga ctccaccagt 180
ggccttttct acgattgttc ggcccacatg ttgtgggttg gtgagcgac tcgtcaactc 240
gatggagcgc atgttgaatt ccttcgtggg gttgccaatc ctcttggcat aaaggtgagc 300
gac 303

<210> 26
<211> 248
<212> DNA
<213> Zea mays

<400> 26

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cctggaagga tcaccataat tacaaggatg ggggcagaga acatgagggt gaagttgcct 120
catctcatcc gtgctgttcg caatgctgga ctgattgtca catggattac tgatcctatg 180
catggaacaa ccatcaaggc cccttgtggc ctgaagactc gtccatttga ctccattctg 240
gctgaagt 248

<210> 27
<211> 262
<212> DNA
<213> Zea mays
<400> 27

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tccgtgctgt tcgcaatgct ggactgattg tcacatggat tactgatcct atgcatggaa 120
acaccatcaa ggccccttgt ggctgaaga ctgctccatt tgactccatt ctggctgaag 180
tgcgtgcctt cttcgatgtg catgaccaag aaggaagcca ccctgggggc gtccaccttg 240
aaatgactgg gcagaacgtg ac 262

<210> 28
<211> 291
<212> DNA
<213> Zea mays
<400> 28

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acaaacctgg aaggatcacc ataattacaa ggatgggggc agagaacatg agagtgaagt 120
tgcctcatct catccgtgct gttcgcaatg ctggattaat tgtcacatgg attactgatc 180
ctatgcatgg aaacaccatc aaggcccctt gtgagctgaa gactcgtcca ttcgactcat 240
tctggetgaa gtgcgcgcat tcttcgacgt gcatgatcaa gaaggaagtc a 291

<210> 29
<211> 313
<212> DNA
<213> Zea mays
<400> 29

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caagctacag gggcgacaac gtcaacggcg acgacttcac cgagaagagc cgcgtgccag 120
 acccgagag gatgatccgc gcctactcgc agtcgggtggc gacgctcaac ctgctccgcg 180
 cgttggcgac cggaggggtac gctgccatgc agcgcgtcac acagtggaac ctcgatttca 240
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 ttgggttcat gac 313

<210> 30
 <211> 305
 <212> DNA
 <213> Zea mays

<400> 30

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 cgcacgagtg ccttctctta ccctacgagc agtctcttac ccgtaaagac tccaccagtg 180
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 acaaa 305

<210> 31
 <211> 258
 <212> DNA
 <213> Zea mays

<400> 31

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 aagtcaccca ggaggcatcc accttgacat gactgggcag aacgtgaccg agtgcattgg 180
 tggatcacgg actgtgacct tcgatgacct gagcgaccga taccacaccc actgtgaccc 240
 aaggctgaac gcctocca 258

<210> 32
 <211> 250
 <212> DNA
 <213> Zea mays

<400> 32

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gcccacatgt tgtgggttgg tgagcgcaact cgacaactcg ctcgagctca tgttgaattc 180
ctccgtggtg ttgccaatcc tctgggcata aaggtgagcg acaaaatgaa ccccagtgag 240
ttggtgaagc 250

<210> 33

<211> 290

<212> DNA

<213> Zea mays

<400> 33

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gtaccgtgaa ttggcccata ggggtggatga ggctcttggg ttcatgactg cagcagggct 120
tacagttgac cacccgataa tgacgactac tgacttctgg acctcgacag agtgcccttct 180
cttaccctac gagcagtctc ttacccgtaa agactccacc agtggccttt tctacgattg 240
ttcggcgcac atgttgtggg ttggtgagcg cactcgtcaa ctgatggag 290

<210> 34

<211> 239

<212> DNA

<213> Zea mays

<400> 34

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ttgtggcctg aagactcgtc cattcgactc aattctggct gaagtgcgag cattcttcga 120
cgtgcatgat caagaaggaa gtcaccagag aggcacccac cttgaaatga ctgggcagaa 180
cgtgaccgag tgcattggtg gatcacggac tgtgaccttc gatgacctta gtgaccgct 239

<210> 35

<211> 220

<212> DNA

<213> Zea mays

<400> 35

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 ctctgacgtg catgatcaag aaggaagtca cccaggaggc atccaccttg aaatgactgg 120
 gcagaacgtg accgagtga ttggtggatc acggactgtg accttcgatg accttagcga 180
 ccgctaccac acccaactgtg acccaagggt gaacgcctcc 220

<210> 36
 <211> 228
 <212> DNA
 <213> Zea mays

<400> 36

gcacgagtga agactcgtcc atttgactcc attctggctg aagtgcgtgc cttcttcgat 60
 gtgcatgacc aagaaggaag ccacctggg ggcgtccacc ttgaaatgac tgggcagaat 120
 gtgaccgagt gcatcgggtg atcacggacc gtgaccttcg acgatctgag cgaccgctac 180
 cacacccact ggcacccaag gctgaatgcc tcccagtcctc tggagctc 228

<210> 37
 <211> 263
 <212> DNA
 <213> Zea mays

<400> 37

gagttgggtga agctgattga tattctgaac ccttcaaaca aacctggaag gatcaccata 60
 attacaagga tggggggcaga gaacatgagg gtgaagttgc ctcatctcat ccgtgctggt 120
 cgcaatgctg gactgattgt cacatggatt actgatccta tgcattgaaa caccatcaag 180
 gcccccttgtg gctgaagac tctgtccattt gactccattc tggctgaagt gcgtgccttc 240
 ttgatgtgc atgaccaaga agg 263

<210> 38
 <211> 241
 <212> DNA
 <213> Zea mays

<400> 38

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 tgatgctctt ggggttcatga ctgcatcggg gcttacagtc gaccaccoga taatgacgac 120

tactgacttc tggacctcgc acgagtgcct tctcttacc tacgagcagg ctcttaccgc 180
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 g 241

<210> 39
 <211> 225
 <212> DNA
 <213> Zea mays

<400> 39

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 tcctatgcat ggaaacacca tcaaggcccc ttgtggcctg aagactcgtc catttgactc 180
 cattctggct gaagtgcgtg ccttcttcga tgtgcatgac caaga 225

<210> 40
 <211> 248
 <212> DNA
 <213> Zea mays

<400> 40

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 gtccacatgt tgtggggttg tgagcgact cgacaactcg atggagctca tgttgaatac 180
 ctccgtggtg ttgccaaacc tctgggcata aaggtagcg acaaaatgca cccagtgag 240
 ttggtgaa 248

<210> 41
 <211> 227
 <212> DNA
 <213> Zea mays

<400> 41

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 ctccaccagt ggccttttct acgattgttc ggcccacatg ttgtgggttg gtgagcgcac 180

tcgtcaactc gatggagcgc atgttgaatt ccttcgtggt gttgccca 227

<210> 42
<211> 170
<212> DNA
<213> Zea mays

<400> 42

agctgattga gattctgaac ccttcaaaca aacctggaag gatcaccata attacaagga 60

tgggggcaga gaacatgaga gtgaagttgc ctcatctcat ccgtgctgtt cgcaatgctg 120

gattgattgt cacatggatt actgaccta tgcattgaaa caccatcaag 170

<210> 43
<211> 277
<212> DNA
<213> Zea mays

<400> 43

gcgcgcattc ttcgacgtgc atgatcaaga aggaagtcac ccaggaggca tccaccttga 60

aatgactggg cagaacgtga ccgagtgcac tgggtggatca cggactgtga ccttcgatga 120

cctgatcgac cgctaccaca cccacgtgac ccaaggctga acgcctccca gtccctggag 180

ctcgccttca tcattgcaga gaggctcagg aagaggagga tgcggtcggg gctcaacaac 240

agcctgcctc tgccaccact ggctttctaa gtagccg 277

<210> 44
<211> 281
<212> DNA
<213> Zea mays

<400> 44

ccaagaatga accaccctgg gggcgtccac cttgaaatga ctgggcagaa cgtgaccgag 60

tgcacgggtg gatcacggac cgtgaccttc gacgatctga gcgaccgcta ccacaccac 120

tgcgacccaa ggctgaatgc ctcccagtc ctggagctcg cctttatcat cgcagagagg 180

ctgaggaaga ggaggatgcg atcggggctc aacagcagcc tgccactgcc gccactggct 240

ttctgagtag ccggagccaa acacaaagga gggttagaat a 281

<210> 45
 <211> 273
 <212> DNA
 <213> Zea mays

<400> 45

ggctacttag aaagccagtg gtggcagagg caggctgttg ttgagccccg accgcatcct 60
 cctcttctctg agcctctctg caatgatgaa ggcgagctcc agggactggg aggcgttcag 120
 ccttgggtca cagtgggtgt ggtagcggtc gctcagggtca tcgaagggtta cagtccgtga 180
 tctaccaatg cactcgggtca cgttctgccc agtcatttca aggtggatgc ctctgggtg 240
 acttccttct tgatcatgca cgtcgaagaa tgc 273

<210> 46
 <211> 201
 <212> DNA
 <213> Zea mays

<400> 46

ggccccttgt ggcctgaaga ctctgccatt tgactccatt ctggctgaag tgcgtgcctt 60
 cttcgatgtg catgaccaag aaggaagcca ccctgggggc gtccaccttg aaatgactgg 120
 gcagaacgtg accgagtgc tgggtggatc acggaccgtg accttcgacg atctgagcga 180
 ccgctaccac acccactgcg a 201

<210> 47
 <211> 228
 <212> DNA
 <213> Zea mays

<400> 47

ccacgcgtcc ggtgaagttg cctcatctca tccgtgctgt tcgcaatgct ggattaattg 60
 tcacatggat tactgatcct atgcatggaa acaccatcaa ggccccttgt ggcctgaaga 120
 ctctgccatt cgactcaatt ctggctgaag tgcgcgcatt cttcgacgtg catgatcaag 180
 aaggaagtca ccaggaggc atccaccttg aaatgactgg gcagaacg 228

<210> 48
 <211> 301
 <212> DNA
 <213> Zea mays

<400> 48

cgtgaattgg cccatagggg ggatgatgct cttgggggtca tgactgcac ggggcttaca 60
gtcgaccacc cgataatgac gactactgac ttctggacct cgaacgaggt gccttcgctt 120
accctacgag caggctctta cccgtgagga ttccaccagt ggctttttct atgattgtta 180
cgccacatg ttgtgggttg gtgagcgac tcgacaactc gatggagctc atgttgaatt 240
cctccgtggt gttgccaacc ctctgggcat aaaggtagc gacaaaatga accccagtga 300
g 301

<210> 49

<211> 332

<212> DNA

<213> Zea mays

<400> 49

gccaccctgg gggcgctcac cttgaaatga ctgggcagac gtgaccgagt gcatcggtgg 60
atcacggacc gtgaccttcg acgatctgag cgaccgctac cacacccact gcgacccaag 120
gctgaatgcc tcccagtccc tggagctcgc ctttatcacc gcagagaggc tgaggaagag 180
gaggatgcga tcggggctca acagcagcct gccactgccg ccaactggctt tctgagtagc 240
cggagccaaa cacaaggag ggtaggaata gctgtggtga ctcggaagag aaagagacag 300
tcgacgcctt gttttgttga tgctagtgtg gt 332

<210> 50

<211> 310

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<400> 50

cgacgacttc accgagaaga gccgcgtgcc ggaccgcag aggatgatcc ggcctacgc 60
acagtgggtg gcgacactca acctgctccg cgcgttcgcc accggagggt acgctgccat 120
gcacgcgtca ctcaaggaa cctcgatttc atggatcaca acgagcaagg tgataggtac 180
cgtgaattgg cccatagggg ggatgatgct cttgggttca tgactgcac ggggcttaca 240
gtcgaccacc cgataatgac gactactgac ttctggacct cgcacgagtg cnccttctct 300

acctacgagc

310

<210> 51
<211> 227
<212> DNA
<213> Zea mays

<400> 51

cgacgacttc accgagaaga gccgcgtgcc agaccgcagc aggatgatcc gcgcctactc 60
gcagtcggtg gcgacgctca acctgctccg cgcgttggcg accggagggt acgctgccat 120
gcacgcgtca cacagtggaa cctcgatttc atggatcaca gcgagcaagg tgataggtac 180
cgtgaattgg cccatagggt ggatgaggct cttgggttca tgactgc 227

<210> 52
<211> 215
<212> DNA
<213> Zea mays

<400> 52

aggcttacag ttgaacaccc gataatgacg actactgact tctggacctc acacgagtgc 60
cttctcatat actaagaaaa gtctcttacc cgtaaagact ccaccagtgg ccttttctac 120
gattgttcgg ccacatgct gtgggttggg gagcgacctc gtcaactcga tggagcgcac 180
gtatgaattc cttcgtgggt ttgcaatcct cttgg 215

<210> 53
<211> 249
<212> DNA
<213> Zea mays

<400> 53

gagaagagcc gcgtgccgga cccgcagagg atgatccgcg cctacgcaca gtcggtggcg 60
aactcaacc tgctccgcgc gttcgcaccc ggagggtacg ctgccatgca cgcgtcactc 120
agtggaaact cgatttcatg gatcacaacg agcaagggtga taggtaccgt gaattggccc 180
atagggtgga tgatgctctt gggttcatga ctgcatcggg gcttacagtc gaccaccoga 240
taatgacga 249

<210> 54

<211> 184
 <212> DNA
 <213> Zea mays

<400> 54

ctccatcgag ttgacgagtg cgctcaccaa cccacaacat gtgggccgaa caatcgtaga 60
 aaaggccact ggtggagtct ttacgggtaa gagactgctc gtagggtaag agaaggcact 120
 cgtgcgaggt ccagaagtca gtagtcgtca ttatcgggtg gtcaactgta agccctgctg 180
 cagt 184

<210> 55
 <211> 202
 <212> DNA
 <213> Zea mays

<400> 55

gaagttgcct catctcatcc gtgctgttcg caatgctgga ttaattgtca catggattac 60
 tgatcctatg catggaaaca ccatcaaggc cccttggtggc ctgaagactc gtccattcga 120
 ctcaattctg gctgaagtgc ggcattctt cgacgtgcat gatcaagaag gaagtcaccc 180
 aggaggcatc caccttgaaa tg 202

<210> 56
 <211> 279
 <212> DNA
 <213> Zea mays

<400> 56

cggctcgagg ccaccctggg ggcgtccacc ttgaaatgac tgggcagaat gtgaccgaga 60
 ccatcggtgg atcacggacc gtgaccttcg acgatctgag cgaccgctac cacaccact 120
 gcgacccaag gctgaatgcc tcccagtccc tggagctcgc ctttatcatc gcagagaggc 180
 tgaggaagag gaggatgcga tcggggctca acagcagcct gccactgccg ccaactggctt 240
 tctgagtagc cggagccaaa cacaaaggag ggtaggaat 279

<210> 57
 <211> 205
 <212> DNA
 <213> Zea mays

<400> 57

tctgaaccgt tggaggagag ggacggcgctc aagctgccaa gctacagggg cgacaacgtc 60
aacggcgacg acttcaccga gaagagccgc gtgccagacc cgcagaggat gatccgcgcc 120
tactcgcagt cgggtggcgac gctcaacctg ctccgcgcgt tggcgaccgg aggggtacgt 180
gccatgcagc gcgtcacaca gtgga 205

<210> 58

<211> 124

<212> DNA

<213> Zea mays

<400> 58

tgtgctgttc gcaatgctgg attaatgtc acatggatta ctgacacctat gcatggaaac 60
accatcaagg ccccttgtgg cctgaagact cgtccattcg actcaattct ggctgaagtg 120
cgcg 124

<210> 59

<211> 272

<212> DNA

<213> Zea mays

<400> 59

caaggtagt gacaagatgg acccagcaga acttgtgcgg ttgattgata tattgaatcc 60
cgaaaacagg gctgggagaa taaccatcat cacaagaatg ggacctgaaa acatgagggt 120
gaaacttcca cacctgatac gcgctgtccg tggggccgggt cagatagtaa catgggttac 180
tgacccaatg catgggaaca ctatgaaggc cccttgcgga ctcaaaaccc gctcgttcga 240
caggattttg ggtgaggtgc gtgcgttctt tg 272

<210> 60

<211> 237

<212> DNA

<213> Zea mays

<400> 60

tggacacggt gctcaaaacc atcgagacgt tcccgcgggt ggtgttcgcc ggagaggcgc 60
gccacctoga ggagcgcagt gccgaggccg ccatgggccc cgccttcac ctcaggggcg 120

gcgactgcgc cgagagcttc aaggagttcc acgccaacaa catccgtgac accttccgta 180
 tcctgctgca gatgggagcc gtgctcatgt tcgggtgtca ggtgccggtc gtcaagg 237

<210> 61
 <211> 215
 <212> DNA
 <213> Zea mays

<400> 61

accaggagga gctggacacg gtgctcaaaa ccatcgagac gttcccgccg gtggtgttcg 60
 ccggagaggg gcgccacctc gaggagcgca tggccgaggg cgccatgggg cgcgcccttca 120
 tcctccaggg cggcgactgc gccgagagct tcaaggagta ccacgccaac aacatccatg 180
 acaccttccg tatcctgctg cagatggggc ccgtg 215

<210> 62
 <211> 125
 <212> DNA
 <213> Zea mays

<400> 62

tggacacggt gctcaagatc atcgagacgt tcccgccggt ggtgttcgcc ggagaagcgc 60
 gtcacctcga ggagcgcatg gccgaagccg ccattggccg cgccttcacg ctccatgacg 120
 gcgac 125

<210> 63
 <211> 287
 <212> DNA
 <213> Zea mays

<400> 63

gtgctgcgga cgggtgggaac gttcccgccc atcgtcttcg ccggcgaggg gcgcaccctc 60
 gaggagcgcc tcgaggaggg cgccgtcggc cgggccttcc tcctccaggg cggcgactgc 120
 gccgagagct tcaaggagtt caacgccaac aacatcaggg acaccttccg cgtcctcatg 180
 caaatgtccg ttgtgctcat gttcggaggg cagatgcctg tcgtcaagggt gggaagaatg 240
 gcaggtcagt ttgcgaagca aggtcagatg gttttgagga gcgggat 287

<210> 64

<211> 305
 <212> DNA
 <213> Zea mays

 <400> 64

 cccacgcgtc cgccacgcg tccggtcagc tgctgggctc cctttagatc accctataat 60
 gacaacagca gaattttgga cgtcacatga gtgtcttctt ctaccttatg agcaagcgtc 120
 cactcgtgag gattccacca cgggcctcta ttatgactgc tctgccact tcttatgggt 180
 cggagagcgc actcgcagc ttgatgggtgc tcacgttgag ttccttcgag gcattgccaa 240
 ccctcttggt atcaagggtta gtgacaagat ggaccagca gaacttgtgc ggttgattga 300
 tatat 305

<210> 65
 <211> 311
 <212> DNA
 <213> Zea mays

 <400> 65

 ggccgcgcct tcatactcca gggcggcgac tgcgcgaga gcttcaagga gttccacgcc 60
 aacaacatcc gtgacacctt ccgtattctg cttcagatgg gcgcctgct catgttcggt 120
 ggtcaggtgc cggtcgtcaa cgtggggagg atggctggcc agtttgcaa gccaaagggtcc 180
 gaaccgttgg aggagaggga cggcgtcaag ctgccaaagct acaggggga caacgtcaac 240
 ggcgacgact tcaccagaga gagccgcgtg ccagaccgc agaggatgat ccgcgcctac 300
 tcgcagtcgg t 311

<210> 66
 <211> 271
 <212> DNA
 <213> Zea mays

 <400> 66

 ggcgcgagag tttcaaggag ttccacgcca acaacatccg tgacaccttc cgcgtccttc 60
 tccagatggg cgtcgtgctc atgttcggtg gccagatgcc ggtcgtcaag gtggggagga 120
 tggctggcca gttcgccaag ccaaggctctg agccgttcga ggagaaggac ggagttaagc 180
 tgccgagctc cagggggcgc aacgtcaacg gcgacgactt caccgagaag agccgcgtgc 240

cggacccgca gaggatgatc cgcgcctacg c

271

<210> 67
<211> 264
<212> DNA
<213> Zea mays

<400> 67

cacgccaaca acatccgtga caccttccgt attctgcttc agatgggcgc cgtgctcatg 60
ttcgggtggc aggtgccggt cgtcaagggt gggaggatgg ctggccagtt tgccaagcca 120
aggtccgaac cgttgaggga gaggacggc gtcaagctgc caagctacag gggcgacaac 180
gtcaacggcg acgacttcac cgagaagagc cgcgtgccag accgcagag gatgatccgc 240
gcctactcgc agtcggtggc gacg 264

<210> 68
<211> 265
<212> DNA
<213> Zea mays

<400> 68

cccacgcgtc cgagatgggc gtcgtgctca tgttcggtgg ccagatgccg gtcgtcaagg 60
tggggaggat ggctggccag ttcgccaagc caaggtctga gccgttcgag gagaaggacg 120
gagttaagct gccgagctac agggcgaca acgtcaacgg cgacgacttc accgagaaga 180
gccgcgtgcc ggacccgcag aggatgatcc gcgcctacgc acagtcggtg gcgacactca 240
acctgctccg cgcgttcgcc accgg 265

<210> 69
<211> 315
<212> DNA
<213> Zea mays

<400> 69

caaggagttc cacgccaaca acatccgtga caccttccgc gtccttctcc agatgggcgt 60
cgtgctcatg ttcgggtggc agatgccggt cgtcaagggt gggaggatgg ctggccagtt 120
cgccaagcca aggtctgagc cgttcgagga gaaggacgga gttaagctgc cgagctacag 180
gggcgacaac gtcaacggcg acgacttcac cgagaagagc cgcgtgccgg accgcagag 240

gatgatccgc gcctacgcac agtcggtggc gacactcaac ctgctccgcg cgttcgccac 300
 cggaggggtac gctgc 315

<210> 70
 <211> 286
 <212> DNA
 <213> Zea mays

<400> 70

gacccgagag tttcaaggag ttccacgcca acaacatccg ggagcccttc cgcgtcgttc 60
 tccagatggg cgtcgtgctc atgttcggtg gccagatgcc ggtcgtcaag gtggggagga 120
 tggctggcca gttcgccaag ccaaggtctg agccgttcga ggagaaggac ggagttaagc 180
 tgccgagcta caggggagac aacgtcaacg gcgacgactt caccgagaag agccgcgtgc 240
 cggacccgca gaggatgata cgcgcctaca gcacatcggt ggagac 286

<210> 71
 <211> 284
 <212> DNA
 <213> Zea mays

<400> 71

catgacctta gtgaccgcta ccacacccac tgtgacccaa ggctgaacgc ctcccagtcc 60
 ctggagctcg ccttcatcat tgcagagagg ctgaggaaga ggaggatgcg gtcggggctc 120
 aacaacagcc tgcctctgcc accactggct ttctaagtag ccgaagctga acagagaagg 180
 tagaggggat agttgcggcg actcgaaaga ttacgcctgt ttatttgttg atgcttggtg 240
 tggaggcctg gtgggtgctc ttggcacaag ttacatgctg ggga 284

<210> 72
 <211> 390
 <212> DNA
 <213> Zea mays

<400> 72

acccacgcgt ccgcccggcg ctccctttgc cgtggtgggg gcgggccggc cgcggtgcgc 60
 tcgtccgcgc ccgcgcccgc gccgtccgcg cggcgctacg gccccgagc cagtgggtccg 120
 tcgggagctg gcggggccgc ccggcgagc agcagcccga gtaccgggac aaggcggacc 180

tggaagacgt gctgcggacg gtgggaacgt tcccgcccat cgtcttcgcc ggcgaggcgc 240
gcaccctcga ggagcgcctc gcgaggccg ccgtcggccg ggccttcctc ctccaggcg 300
gcgactgcgc cgagagcttc aaggagttca acgccaacaa catcagggaac accttcgcgc 360
tcctcctgca aatgtccgtt gtgctcatgt 390

<210> 73
<211> 322
<212> DNA
<213> Zea mays
<223> unsure at all n locations
<400> 73

gtttataaat tctcatgntt ccgacccttg catgctatcg ctcttatccc acgtagtatc 60
atgcccgcaa ttatacatat attttttttt cctccaatt catgaatcca tctggaggac 120
attttaaacg ctgtcataca ataatctatt tctatacctc acataattac cttctcctac 180
cttactagca atccttaacc cttcaagact ccaccaccga tcttttctac tactgtcct 240
tccacatgct ctcatcgcac gagctcacc tgcaacttga tacctcccat ctacagttcc 300
tgatggagat cgccaacccc ct 322

<210> 74
<211> 439
<212> DNA
<213> Zea mays
<400> 74

gcatgactga gtttgtaggt accgtgaatt ggcacatcgg gttgatgatg cccttggatt 60
catgggtgca actgggctga caatggacca gcctttgacg acgatgatcg agtttctgga 120
cctaacatga gtgcttcctc ctacottaca agcaagcctt aaccggcag gattccacca 180
ccggcctttc tataaatggt tcggccacat actcttggtt cggagagcga caccggaact 240
tgaatggccc atatgtagag tctctgaggg agatcgaaa ccctcttggt atcaaggtga 300
gccacaatat ggagcccgga gagctggaaa atctgatcga catactgaac ccgacgaaca 360
agcccgagag gatcacgcgc atcacaggga tgggcgcaga gcacatcagg gtcaagttac 420
ctcaccttat ccgcgcggt 439

<210> 75
 <211> 434
 <212> DNA
 <213> Zea mays

<400> 75

cccacacatc cacatttcca ataacacatt tcacgcgaac atataccatc cttcactggt 60
 ggcatcatga acacatgtgg gtgaaactta cacacctgat acccgctgtc cattctgccc 120
 gtcagatagt aacatggggtt actgacccaa tgcacgggaa cactattaag gccattgctg 180
 gactcaaaac cctctcgttc gacaggattt tgggtcacgt gcgtgcgttc tttgatgtcc 240
 acgaacaaga agggagccac cctggaggag tgcactctaga gatgactgga caaaatgtta 300
 cacagtgcac cggcggttca cgtactgtta ccttcgatga tctgggggtca cgctaccaca 360
 cgcactgcta cccaaggctc aatgccttac agtctctgga gattgcattt atcatcgccg 420
 aacgccttat gaaa 434

<210> 76
 <211> 437
 <212> DNA
 <213> Zea mays

<400> 76

cggacgcgtg ggcgagcaag ccttaacccg gcaagactcc accaccggtc ttttctacga 60
 ctgctccgcc cacatgctct gggtcggcga gcgcacccgg cagcttgatg gcgtccatgt 120
 ggagttcctg aggggggatcg ccaaccccct tggcatcaag gtgagcgaca agatggagcc 180
 cggcgagctg gtgaagctga tcgacatact gaacccgacg aacaagcccg ggaggatcac 240
 cgtcatcaca aggatggggg cagagaacat cagggtcaag ttacctcacc ttatccgcgc 300
 ggtccgccag gctggacaga gtgtcacctg gatcactgac ccgatgcacg ggaacacccat 360
 caagactcct tgcggacgaa agactcggcc atttgactcc attctggccg aggtacgggc 420
 cttcttcgac gtgcacg 437

<210> 77
 <211> 347
 <212> DNA
 <213> Zea mays

<400> 77

ggcacgccta cgcttccgcc tacgcgttgt ctgactcgtg ggctttcgcg tggtcggacg 60
 cgtgggccga cgctggtgcc gtagaagaag ccggtagcgc acgggaagtg tgcggtctac 120
 agctggagggt ccaagaaggc tttgcagctc cccgagtacc cgaacgcgga tgagctggac 180
 gctgtgctga agaccatcga gacgttcccc ccggtggtgt tcgtcggaga ggctcgcctg 240
 ctcgaggagc gcatggccga ggccggcatg ggccgcgcct tcgtcctcca aggtggcgac 300
 tgctccgaga gtttcaagga gttccacgcc aacaacatgc gtgacac 347

<210> 78
 <211> 258
 <212> DNA
 <213> Zea mays

<400> 78

tcgcccacgc gtacgcccac gcgtacgcc acgcgtccgt ccacgcgtcc ggcaagggtga 60
 taagtaccgg gaattggccc atacggtgga tgatgctctt gggttcatga ctgcatcggg 120
 gcttacaggc gaacaaccgg ttatgaccac tactgacttc tggaccttgg accaatggct 180
 tttcttacc tacgagcagg ctcttaccgg tgaggattcc accagtggcc ttttctatga 240
 atggtcgggc cacaatgt 258

<210> 79
 <211> 448
 <212> DNA
 <213> Zea mays

<400> 79

acgctgactt ctggacctcg cacgagtgcc gtctcttacc ctacgagcag gctcttgccc 60
 gtggggattc caccaggggc cttttctatg attgttcggc ccacatgttg tgggttggtg 120
 agcgcaactcg acaactcgat ggagctcatg ttgaattcct ccgtggtgtt gccaaccccta 180
 tgggcataaaa ggtgagcgac aaaatgaacc ccagtgagtt ggtgaagctg attgatattc 240
 tgaacccttc aaacaaacct ggaaggatca ccataattac aaggatgggg gcagagaaca 300
 tgagggtgaa gttgcctcat ctcatccgtg ctgttcgcaa tgctggactg attgtcacat 360
 ggattactga tcctatgcat ggaaacacca tcaaggcccc ttgtggcctg aagactcgtc 420
 catttgactc cattctggct gaagtgcg 448

<210> 80
 <211> 459
 <212> DNA
 <213> Zea mays

 <223> unsure at all n locations
 <400> 80

cggtaatggt gacttctggc cgcctagtc gaagcagggc cgtccccact nccgagtaca 60
 ctagttnaa tcctccgtgg tgttgccaac cctctgggca taaaggtgag tgcacaacaa 120
 tgaatcccca gtgagttggt gaagctgatt gatattctga acccttcaaa caaacctgga 180
 aggatcacca taattacaag gatgggggca gagaacatga gggatgaagt gcctcatctc 240
 atccgtgctg ttcgcaatgc tggactgatt gtcacatgga ttactgatcc tatgcatgga 300
 aacaccatca agggcccttg tggcctgaag actcgtccat ttgactccat tctggctgaa 360
 gtgctgctc tcttcgatgt gcatgaccaa gaatgaagcc accctggggg cgtccacctt 420
 gaaatgactg ggcagaacgt gaccgagtgc atcgggtgga 459

<210> 81
 <211> 369
 <212> DNA
 <213> Zea mays

 <223> unsure at all n locations
 <400> 81

cacatgttgt gggttggtga gcgcactcgt taactcgatg gagcgcatgt tgaattcctt 60
 ggtggtgtgg ccaatcctct tggcataaag gtgagcgaca aaatgaaccc cagtgacttg 120
 gtgaagctga ttgagattct gaacccttca aacaaacctg gaaggatcac cataattaca 180
 aggatggggg cagagaacat gagagtgaag ttgcctcatc ttatccgtgc tgttcgcaat 240
 gctggattaa ttgtcacatg gattactgat cctatgcatg gaaacacccat caaggcccct 300
 tgtggccctg agactcgtnc atttgactca attctggctg aagtgcgcgc attcttcgat 360
 gtgcatgat 369

<210> 82
 <211> 455
 <212> DNA
 <213> Zea mays

<400> 82

ggggtgagac gttactatgc actgtcggct caggactagc gggtcgatgc aagcctctag 60
atgcagtctc acaaccgtgc tgttcgcaat gctggactga ttgtcacatg gattactgat 120
cctatgcatg gaaacaccat caaggccctt tgtggcctga agactcgtcc atttgactcc 180
attctggctg aagtgcgtgc cttcttcgat gtgcatgacc aagaaggaag ccaccctggg 240
ggcgtccacc ttgaaatgac tgggcagaac gtgaccgagt gcatcgggtg atcacggacc 300
gtgaccttcg acgatctgag cgaccgctac cacaccact gcgaccaag gctgaatgcc 360
tcccagtcctc tggagctcgc ctttatcctc gcagagaggc tgaggaagag gacgatgcga 420
tcggggctca acagcagcct gccactgccg cact 455

<210> 83
<211> 405
<212> DNA
<213> Zea mays

<400> 83

cccacgcgtt cgcccacgag tccgcccacg cgtccgcca cgcgtccggc aaggtgatag 60
gtaccgtgaa ttggcccata ggggtggatga tgctcttggg ttcattgactg catcggggct 120
tacagtcgac caccgataa tgacgactac tgacttctgg acctcgcacg agtgccttct 180
cttaccctac gagcaggctc ttaccggtga ggattccacc agtggccttt tctatgattg 240
ttcggcccac atgttgtggg ttggtgagcg cactcgacaa ctogatggag ctcatgttga 300
attcctccgt ggtgttgcca accctctggg cataaagggtg agcgacaaa tgaaccccag 360
tgagttggtg aagctgattg atattctgaa cccttcaaac aaacc 405

<210> 84
<211> 444
<212> DNA
<213> Zea mays

<400> 84

gtgccggacc cgcagaggat gatccgcgcc tacgcacagt cgggtggcgac actcaacctg 60
gtccggggcgt tcgccaccgg agggtagcgt gccatgcagc gcgtcactca gtggaacctc 120
gatttcattg atcacaacga gcaaggatg aggtaccgtg aattggccca taggggtggat 180

gatgctcttg ggttcatgac tgcacgagg cttacagtcg accacccgat aatgacgact 240
 actgacttct ggacctcgca cgagtgcctt ctcttacctt acgagcaggc tcttaccctg 300
 gaggattcca ccagtggcct tttctatgat tgttcggccc acatgttggtg ggttggtgag 360
 cgactcgac aactcgatgg agctcatgtt gaattcctcc gtggtgttgc caaccctctg 420
 ggcataaagg tgagcgacaa aatg 444

<210> 85
 <211> 371
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <400> 85

ctgaaccctt caaacaacc tggaaggatc accataatta caaggatggg ggcagagaac 60
 atgagagtga agttgcctca tcttatccgt gctgttcgca atgctggatt aattgtcaca 120
 tggattactg atcctatgca tggaaacacc atcaaggccc cttgtggcct gaagactcgt 180
 ncatttgact caattctggc tgaagtgcgc gcattcttcg atgtgcatga tcaagaaaga 240
 agtcacccca gaggcattcca ccttgaaatg actgngcaga acgtgaccga gtgcattggt 300
 ggatcacgga ctgtgacctt cgatgacctg acgaccgcta ccacacccac tgtgacccaa 360
 ggctgaacgc c 371

<210> 86
 <211> 474
 <212> DNA
 <213> Zea mays

<400> 86

gggcgtgggt aggtcacgag caggctcggg cagcactcgc gggctgacac acgcgtcaag 60
 acttcacga gaaaagccgc gtgccggacc cgcagaggat gatccgcgcc tacgcacagt 120
 cgggtggcgac actcaacctg ctccgcgcgt tcgccaccgg agggtagct gccatgcagc 180
 gcgtcactca gtggaacctc gatttcatgg atcacaacga gcaaggatgat aggtaccgtg 240
 aattggccca taaggatgat gatgctcttg ggttcatgac tgcacgagg cttacagtcg 300
 accacccgat aatgacgact actgacttct ggacctcgca cgagtgcctt ctcttacctt 360

acgagcaggc tcttaccgt gaggattcca ccagtggcct tttctatgat tggtcggccc 420
 acatgttggtg ggttggtgaa gcgaatcgac aactcgatgg acctcatggt gaat 474

<210> 87
 <211> 423
 <212> DNA
 <213> Zea mays

<400> 87

gaagactcgt ccatttgact ccattctggc tgaagtgcgt gccttcttcg atgtgcatga 60
 ccaagaagga agccaccctg ggggcgtcca ccttgaaatg actgggcaga acgtgaccga 120
 gtgcatcggg ggatcacgga cagtgcctt cgacgatctg agcgaccgct accacaccca 180
 ctgcgaccca aggctgaatg cctccagtc cctggagctc gcctttatca tcgcagagag 240
 gctgaggaag aggaggatgc gatcggggct caacagcagc ctgccactgc cgccactggc 300
 tttctgagta gccggagcca aacacaaagg agggtaggaa tagctgtggt gactcggaag 360
 agaaagagac agtcgacgcc ttggtttggt gatgcttagt gtggtgacct ggtggtggtg 420
 gtg 423

<210> 88
 <211> 369
 <212> DNA
 <213> Zea mays
 <223> unsure at all n locations
 <400> 88

ctggctgaag tgcgtgcctt cttcgatgtg catgaccaag aaggaagcca ccctgggggc 60
 gtccaccttg aaatgactgg gcagaacgtg accgagtga tcggtggatc acggaccgtg 120
 accttcgacg atctgagcga ccgctaccac acccactgcg acccaaggct gaatgcctcc 180
 cagtccttg agctgcctt tatcatcgca gagaggctga ggaagaggag gatgcgatcg 240
 gggctcaaca gcagcctgcc actgccnca ctggctttct gagtagccgg agccaaacac 300
 aaagggaggt aggaatagct gtggtgacct cggaggagaa gagacagtcg acgccttggt 360
 tggatgatgc 369

<210> 89
 <211> 376

<212> DNA
<213> Zea mays

<400> 89

aattaagctg ccgagctaca ggggcgacaa cgtcaacggc gacgacttca ccgagaagag 60
ccgcgtgccg gacccgcaga ggatgatccg cgcctacgca cagtcggtgg cgacactcaa 120
cctgctccgc gcgttcgcca ccggagggtta cgctgccatg cagcgcgtca ctcagtggaa 180
cctcgatttc atggatcaca acgagcaagg tgataggtac cgtgaattgg cccatagggt 240
ggatgatgct cttgggttca tgactgcacg ggggcttaca gtcgaccacc cgataatgac 300
aactactgac tttctggact ccgcacaatt gcctccccta acccaacgaa caaggtccta 360
acccttaagg atccaa 376

<210> 90
<211> 205
<212> DNA
<213> Zea mays

<400> 90

gaagttgcct catcttatcc gtgctgttcg caatgctgga ttaattgtca catggatggc 60
tgatcctatg catggaaaca ccatcaaggc cccttggtggc ctgaagactc gtccatttga 120
ctcaattctg gctgaagtgc gcgcattctt cgatgtgcat gatcaagaat gaagtcaccc 180
aggaggcatc caccttgaaa tgact 205

<210> 91
<211> 391
<212> DNA
<213> Zea mays

<400> 91

gagtcgctct gcactgcacg actcctcccc catctaccac tacctgtcta cctaccgagc 60
ccatcgactg cccctcgcaa cgcaatggcg ctcgccacca actccgccgc tgccgcagca 120
gctgccgtat ccggcggcgc ggcacccag ccgcaccgcg cggccacgtt cctcccgtg 180
aagaggcgca ccatctccgc catccacgcc gccgaccgt ctaagaacaa cgggcccgcc 240
gtccccgcgg ccgcgcgcgc taagtcatct gcctctgcgg tggccacgcc ggagaagaat 300
ccggcggcgc cggtaaagtg ggcggtcgac agctggaagt cgaagaaggc actgcagctc 360

ccagagtacc cgaaccagga ggagctggac a

391

<210> 92
<211> 438
<212> DNA
<213> Zea mays

<400> 92

gcggttgatt gatattga atccgaaaa cagggctggg agaataacca tcatcacaag 60
aatgggacct gaaaacatga gggtgaaact tccacacctg atacgcgctg tccgtggggc 120
cggtcagata gtaacatggg ttactgacct aatgcatggg aacactatga aggccccttg 180
cggactcaaa acccgctcgt tcgacaggat tttgggtgag gtgctgctg tctttgatgt 240
ccacgaacaa gaaggagacc accctggagg agtgcattga gagatgactg gacaaaatgt 300
tacagagtgc atcggcggtt cacgtacggt gaccttcgat gatctggggg cacgctacca 360
cacgcactgc gaccaaggc tcaatgcctc acagtctctg gagatggcat ttatcatcgc 420
cgagcgcctt aagaaaag 438

<210> 93
<211> 335
<212> DNA
<213> Zea mays

<400> 93

gtgacaagat ggaccagca gaacttgtgc ggttgattga tatattgaat cccgaaaaca 60
gggctgggag aataaccatc atcacaagaa tgggacctga aaacatgagg gtgaaacttc 120
cacacctgat acgcgctgtc cgtggggccg gtcagatagt aacatgggtt actgacccaa 180
tgcatgggaa cactatgaag gccccttgcg gactcaaaac ccgctcgttc gataggattt 240
tgggtgaggt gcgtgcgttc tttgatgttc caacggaaaa cccaaaaaaa ggggaaaaaa 300
aagggggggg gggggaaaaa aaggggcccc cccc 335

<210> 94
<211> 462
<212> DNA
<213> Zea mays

<400> 94

gcgggcgcta cgcgcaactt agctgcagtg cggtcagatt acgggcgagc acgcgtcgag 60
 ccggaaccgg tcccccgctc gcccccgccc ccgccccctt cgcgccggcc caacggcccc 120
 cgaaccaatt ggccgttcgg aaccggggcg ggccccccgg cgcaacagca gcccgagtac 180
 ccggaacaag cggacctgga agacgtgctg cggacgggtg gaacgttccc gcccatcgtc 240
 ttgcgcggcg aggcgcgcac cctcgaggag cgctcgcgg aggcgcgcgt cggccggggc 300
 ttctctctcc agggcggcga ctgcgcgag agcttcaagg agttcaacgc caacaacatc 360
 agggacacct tccgcgtcct cctgcaaagt tccgttgtgc tcatgttcgg aggccagatg 420
 cctgtcgtca aggtgggaag aatggcaagt cagtttgca ag 462

<210> 95
 <211> 436
 <212> DNA
 <213> Zea mays

<400> 95

cagagaacag cgaacaaggt gataggtaca tggagttggc tcaccgagtt gacgaagctt 60
 tggggttcat gtcagctgct gggctccctt tagatcacc tataatgaca acagcagaat 120
 tttggacgtc acatgagtgt cttcttctac cttatgagca agcgtcact cgtgaggatt 180
 ccaccacggg cctctattat gactgctctg ccacttcct atgggtcgga gagcgcactc 240
 gccagcttga tgggtctcac gttgagttcc ttcgaggcat tgccaacct cttgggtatca 300
 aggttagtga caagatggac ccagcagaac ttgtgcggtt gattgatata ttgaatcccg 360
 aaaacagggc tgggagaata accatcatca caagaatggg acctgaaaac atgaggggtga 420
 aacttcaca cctgat 436

<210> 96
 <211> 472
 <212> DNA
 <213> Zea mays

<400> 96

ggttaatagg tacatggagt tggctcaccg agttgacgaa gctttggggc tcatgtcagg 60
 tgctgggctc ctttagatc accctataat gacaacagca gaattttgga cgtcacatga 120
 gtgtcttctt ctaccttatg agcaagcgt cactcgtgag gattccacca cgggcctcta 180

ttatgactgc tctgcccact tcctatgggt cggagagcgc actcgccagc ttgatgggtgc 240
 tcacgttgag ttccttcgag gcattgccaa cctctttgggt atcaagggtta gtgacaagat 300
 ggacccagca gaacttgtgc ggttgattga tatattgaat cccgaaaaca gggctgggag 360
 aataaccatc atcacaagaa tgggacctga aaacatgagg gtgaaacttc cacacctgat 420
 acgcgctgtc ccgtagggcgc gtcagatagg tacatggggtt actgacccaa tg 472

<210> 97
 <211> 427
 <212> DNA
 <213> Zea mays

<400> 97

tgacctgagc gaccgctacc acacccactg tgacccaagg ctgaacgcct cccagtcgct 60
 ggagctcgcc ttcattcattg cagagaggct caggaagagg acgatgccgt cggggctcaa 120
 caacagcctg cctctgccac cactggcttt ctaagtagcc gaagctgaac agagaaggta 180
 gagggatagt tgcggcgact cgaaagatta cgctgttta tttgctgatg cttgggtgtg 240
 aggcctggcg ggcgctcttg gcacaagtta catgctgggg agctatagga gggtagctgt 300
 tgcgttggtg aagacagtag ctagtattat gtgttgtaat tgtatgcctt cgattcatgt 360
 tctgagtgcg tgacttgtcg actttgctgc ttctgggggtt ctgaccttgg taaggagaga 420
 atataga 427

<210> 98
 <211> 220
 <212> DNA
 <213> Zea mays

<400> 98

cggagaatga gctgcttgtc ccactgaagg ctgctctcct agatattggg aaagaaagga 60
 aggaagcatg gattagttgg gtacagactt atattgaaga gctggtggag agcggcggtc 120
 ctgatgaaga aaggaaagcc gcgatgaact ctgttaatcc aaagtatatt ctccgcaact 180
 atctctgccg gtacactatc gacgcagctg cagcaggcga 220

<210> 99
 <211> 293

<212> DNA
<213> Zea mays

<400> 99

acctggtgca atagtttgtc gtgtagcacc gtctttttta cgttttggtt cgtatcagat 60
acacgcttca aggggcaaag aggacattga gattgttcgt cgtttggcag actacacgat 120
acatcatcac tttccacatc ttgaaaatat gaaaaagagt gaaggtttgt cattcgagac 180
agctatagga gattcccca caatagatct cacatcaaac aaatatgcag cttgggcagt 240
tgagggtggcg gagaggactg cttacttgat agctagatgg caagggtgtg gct 293

<210> 100
<211> 261
<212> DNA
<213> Glycine max

<400> 100

cgcacaagcc caagcccca gccaacaat ctgcatcccc ggccgcggcc cgtgcaacca 60
aatggggccgt ggacagctgg aagtccaaga aggccctgca gctgcccga taccccaacc 120
aggaggatct cgaggccgtc ctccgcaccc tcgacgcttc cgctcacatc gtcttcgccg 180
gcgaggcccg gacactcgag gagcacctcg ccgatgccgc catgggaaat gccttcttcc 240
tcaatggcgg agactgtgcc g 261

<210> 101
<211> 257
<212> DNA
<213> Glycine max

<400> 101

caccttcac atggctgagt tcttcttccc aaacaagtcg gtcggcgacc agaacagtgt 60
cgaggattgg cgcacccg gcatgactcc tttgactcct cccgatctcc tccagcatga 120
aattcgccag acagacaagt caagagagac tgtcgtcaag tcccgcaaag aggctgtcga 180
ggtcgtacac ggcggtggacg agaagaggag actcatggtt tcattggtcc ttgctccatc 240
cacgaccctg ccatggc 257

<210> 102
<211> 236

<212> DNA
<213> Glycine max

<400> 102

ctcccttatg agcaagcact tactagggag gattctacta ctgggcttca ttatgattgc 60
tcagctcaca tgctatgggt tggggaacgt acccgccaac ttgatgggtgc tcatgttgaa 120
ttcttgagag gagttgctaa tccacttggc atcaaggtga gtgataagat ggttcccgat 180
gaacttgta agctgataga tattctgaac cctaaaaaca agcctggaag aattac 236

<210> 103
<211> 245
<212> DNA
<213> Glycine max

<400> 103

cgccggtgag gccaggacat tggaggagca tctcgccgag gccgccatgg gaaatgcctt 60
cctcctccag ggcgagagact gtgctgagag cttcaaggag ttcaatgcca acaacatccg 120
tgacaccttc cgcacatcc tccagatgag cgctgctcatg atgttcggcg gccaaatgcc 180
tgtcatcaag gtggggagaa tggcggggca atttgcaaag cctcgttcgg attcgtttga 240
ggagc 245

<210> 104
<211> 255
<212> DNA
<213> Glycine max

<400> 104

ttttagaact ttaatctcaa aatgtattca atattctttt gaaaatataa ttcataaacg 60
attttaaaac accacctcgc cgaggccgcc atgggaaatg ccttcctcct ccagggcgga 120
gactgtgccg agagcttcaa ggagttcaat gccacaaca tccgtgacac cttccgcac 180
atcctccaga tgagcgtcgt catgatgttc ggcggccaaa tgcccgtcat caaggtgggg 240
agaatggcgg ggcaa 255

<210> 105
<211> 254
<212> DNA
<213> Glycine max

<400> 105

aagatgacgg gtcagaatgt gaccgagtgc attggtgggt caaggacggt cacatttgat 60
gacttgagct cacgtaccca cacacactgt gaccaaggc tcaatgcttc acaatctctt 120
gagcttgcta tcatcatcgc cgagcgtttg agaaagagca ggatcagatc gcagcaacct 180
cttgcccctc taggagtgtg aaagtgcctt caaaaccaac aagagaaaga tatttttggt 240
cttttttttt tttg 254

<210> 106

<211> 278

<212> DNA

<213> Glycine max

<400> 106

ggagaatggc ggggcaatth gcaaagcctc gttcggattc gtttgaggag aagaatggcg 60
tgaagcttcc gagttacaga ggggataaca ttaacggaga ctctttcgac gagaagtcga 120
ggattccgga tccgcagagg atgattaggg cttattgcca agccgcggcc acgctgaatc 180
ttctcagagc ttttgccacc ggtgggttatg ctgctatgca gagggttact cagtgggaatt 240
tggacttcac ggatcacagc gaacagggag ataggtac 278

<210> 107

<211> 267

<212> DNA

<213> Glycine max

<400> 107

attcgtttga ggagaagaat ggcgtgaagc ttccgagtta cagaggggat aacattaacg 60
gagactcttt cgacgagaag tcgaggattc cggatccgca gaggatgatt agggcttatt 120
gccaagccgc ggccacgctg aatctttctca gagcttttgc caccggtggt tatgctgcta 180
tgcagagggt tactcagtgg aatttggact tcacggatca cagcgaacag ggagataggt 240
accgagagct tgctaaccga gttgatg 267

<210> 108

<211> 267

<212> DNA

<213> Glycine max

<400> 108

tcggcggcca aatgcccgtc atcaaggtgg ggagaatggc ggggcaattt gcgaagcgag 60
gtcggattcg tttgaggaga agaacggcgt gaagcttccg agttacagag gggacaacat 120
taacggagac tcctttgacg agaagtcgag gattccggat ccgcagagga tgattagggc 180
ttattgcaa gccgcggcga cgctgaatct tctcagagct ttcgccaccg gtggttatgc 240
tgctatgcag agggttactc agtgga 267

<210> 109

<211> 247

<212> DNA

<213> Glycine max

<400> 109

gggagaatgg cggggcaatt tgcaaagcct cgttcggatt cgtttgagga gaagaatggc 60
gtgaagcttc cgagttacag aggggataac attaacggag actctttcga cgagaagtcg 120
aggattccgg atccgcagag gatgattagg gcttattgcc aagccgcggc cacgctgaat 180
cttctcagag cttttgccac cggtggttat gctgctatgc agagggttac tcagtggaat 240
ttggact 247

<210> 110

<211> 263

<212> DNA

<213> Glycine max

<400> 110

catccgtgac accttccgca tcatcctcca gatgagcgtc gtcatgatgt tcggcggcca 60
aatgcccgtc atcaaggtgg ggagaatggc ggggcaattt gcgaaccgag gtcggattcg 120
tttgaggaga agaacggcgt gaagcttccg agttacagag gggacaacat taacggagac 180
tcctttgacg agaagtcgag gattccggat ccgcagagga tgattagggc ttattgcaa 240
gccgcggcga cgctgaatct tct 263

<210> 111

<211> 247

<212> DNA

<213> Glycine max

<400> 111

ctcgagccga ttcggctcga ggaggggata acattaacgg agactacttt cgacgagaag 60
tcgcgggattc cggatccgca gaagatgatt agggcttatt gccaaagccgc ggccacgctg 120
aatctttctca gagcttttgc caccggtggt tatgctgcta tgcagagggt tactcagtgg 180
aatttgact tcacggatca cagcgaacag ggagataggt accgagagct tgctaaccga 240
gttgatg 247

<210> 112

<211> 217

<212> DNA

<213> Glycine max

<223> unsure at all n locations

<400> 112

aatttgtaaa gctctcgact cggatttcgt tttagaggaga agtaatggtc gtgaagcttt 60
ccgagttaca gaggtggata actgttaacg tgtagactct ttcgacgtat tagtcgagtg 120
attccggatc cgcataggat gatnagggt tctcgccatt ccgcggctac gctgaatctt 180
ctcatagctt tttccaccgg tggttatgct gctatgc 217

<210> 113

<211> 228

<212> DNA

<213> Glycine max

<400> 113

cgaggtcgga ttcgtttgag gagaagaacg gcgtgaagct tccgagttac agatgggaca 60
acattaacgg agactcgttt gacgataagt cgaggattcc ggatccgcag aggatgatta 120
gggcttattg ccaagccgcg gcgacgctga atcttctcag agctttcgcc accggtgggt 180
atgctgctat gcacacgggt actcagtgga atttggactt cacggatc 228

<210> 114

<211> 310

<212> DNA

<213> Glycine max

<223> unsure at all n locations

<400> 114

tccaaacaca ccaattgcat ttgcattacc attcacaatg gcaatctcct ccacttccaa 60
ctccctcatt cccaccaaatt ctctantccc ccaatcccac cccctcattc ccaacaccag 120
gcccgccttc cggcccgaagc cgggcccatc accttccatc ntcgcccgttc acgcccgcga 180
gcccgccttc aaccccgtcg tcacgcgaaa gcccaagccc caagcccac aacctcccc 240
ggcctcggcc cgggcaacga aatgggcccgt ggacagctgg aagtnccaga aagccctgca 300
gctgcccga 310

<210> 115
<211> 284
<212> DNA
<213> Glycine max

<400> 115

aaacacacca attgcatttg cattaccatt cacaatggca atctcctcca cttccaactc 60
ctcattccc accaaatctc taatccccca atcccacccc ctcattccca acaccaggcc 120
cgccctccgg cccaagcccg gcccatcccc ttccatcttc gcggttcacg ccgcccagcc 180
cgccaaaaac cccgtcgta ccgacaagcc caagccccc gcccacaac ctcccccgcc 240
ctcgccccgg gcaacgaaat gggccgtgga cagctggaag tcaa 284

<210> 116
<211> 286
<212> DNA
<213> Glycine max

<400> 116

cacaatggca atctcctcca cttccaactc ctcattccc accaaatctc taatccccca 60
atcccacccc ctcattccca acaccaggcc cgccctccgg cccaagcccg gcccatcccc 120
ttccatcttc gcggttcacg ccgcccagcc cgccaaaaac cccgtcgta ccgacaagcc 180
caagccccc gcccacaac ctcccccgcc ctcggcccg gcaacgaaat gggccgtgga 240
cagctggaag tcaaagaaag ccctgcagct gccgaatac ccgagc 286

<210> 117
<211> 285
<212> DNA
<213> Glycine max

<400> 117

gggagaagct cgctcaggct gccatgggga acgcttttct ccttcagggc ggtgattgcg 60
ccgagagctt caaggaattc actgccaaca acatccgtga caccttccgt gtcatecttc 120
aaatgggtgt ggtcctcatg ttcggtggcc aaatgcccggt tatcaagggtg gggagaatgg 180
caggtcaatt tgcaaagccg agatccgatt catttgagga gaagaatgga gtgacgctcc 240
cgattacagg ggtgataatg tgaatggcga tgcatttgac gcggc 285

<210> 118

<211> 176

<212> DNA

<213> Glycine max

<400> 118

atccttcaaa tgggtgtggt cctcatgttc ggtggccaaa tgcccgttat caaggtgggg 60
agaatggcag gtcaatttgc aaagccgaga tccgattcat ttgaggagaa gaatggagtg 120
acgctcccga gttacagggg tgataatgtg aatggcgatg catttgacgc ggcatc 176

<210> 119

<211> 249

<212> DNA

<213> Glycine max

<400> 119

cagatgcgaa tgaattggac ctagtctctc aaacctctc ttcttttccc ccaatcgtct 60
tcgccggcga ggcgaggaat ctggaggaga agctcgctca ggctgccatg gggaacgctt 120
ttctccttca gggcggtgat tgcgcgaga gcttcaagga attcaactgcc aacaacatcc 180
gtgacaccta ccgtgtcatc cttcaaatgg gtgtggctct catgttcggt ggccaaatgc 240
ccgttatca 249

<210> 120

<211> 269

<212> DNA

<213> Glycine max

<400> 120

cccagatgcg aatgaattgg acctagctct ccacacctc tcttcttttc ccccaatcgt 60

cttcgccggc gaggcgagga atctggagga gaagctcgct caggttgcca tcgggaacgc 120
 ttttctcctt cagggcggtg attgcgccga gagcttcaag gaattcactg ccaacaacat 180
 ccgtgacacc ttccgtgtca tccttcaa at ggggtgtggc ctcattgttcg gtggccaaat 240
 gcccgttatc aaggtgggga gaatggcag 269

<210> 121
 <211> 270
 <212> DNA
 <213> Glycine max
 <223> unsure at all n locations
 <400> 121

gaacgtaccc gccaaactga tgggtgctcat gttgaattct tgagaggagt tgctaatacca 60
 cttggcatca aggtgagtga taagatgggt cccgatgaac ttgttaagct gatagatat 120
 ctgaacccta aaaacaagcc tggaagaatt acagtcattg ttagaatggg agctgagaat 180
 atgcgagtga agcttccaca tcttatcagg gcagttcgca gagcagggtca attgtcactt 240
 ggggttagtga cnccatgcat gggaacacca 270

<210> 122
 <211> 255
 <212> DNA
 <213> Glycine max
 <223> unsure at all n locations
 <400> 122

aatccacttg gcatcaaggt gaggatgaag atgggtcccg atgaacttgt taagctgata 60
 gatattctga accctaaaaa caagcctgga agaattacag ttattgttag aatgggagct 120
 gagaatatgc gaggtaagct tccacatctt atcagggcag ttgcagagc aggtcaaatt 180
 gtcacttggg ttagtgacct catgcatggg aacaccatta aagctccatc tggacttaaa 240
 accgtctttt tgang 255

<210> 123
 <211> 266
 <212> DNA
 <213> Glycine max
 <223> unsure at all n locations

<400> 123

tgaaccctaa aaacaagcct ggaagaatta cagtcattgt tagaatggga gctgagaata 60
tgcgagtga gcttcncaca tcttatcagg gcngttcgca gagcaggta aattgtcact 120
tggttnnagt accccatgca tgggaacacc attaaagctc catctggact taaaacccgc 180
tnttntgatg caataagggc tgagctgagg gcnttnnnn nngtgcagat caagaaggaa 240
gctacccagg aggggttcat tagaga 266

<210> 124

<211> 258

<212> DNA

<213> Glycine max

<400> 124

ggttactcag tggaatttgg acttcacgga tcacagcgaa cagggagata ggtaccgaga 60
gcttgctaac cgagttgatg aggctcttgg attcatggct gctgctgggc tcacagtgga 120
ccatcccata atgagaacaa ctgaattctg gacatctcat gagtgccttat tgttgccctta 180
tgaacaatcc ctcaccaggt tggattcaac ttctgggtctc tactatgact gttcagccca 240
tatgctctgg gttgggga 258

<210> 125

<211> 241

<212> DNA

<213> Glycine max

<400> 125

ggttactcag tggaatttgg acttcacgga tcacagcgaa cagggagata ggtaccgaga 60
gcttgctaac cgagttgatg aggctcttgg attcatggct gctgctgggc tcacagtgga 120
ccatcccata atgagaacaa ctgaattctg gacatctcat gagtgccttat tgttgccctta 180
tgaacaatcc ctcaccaggt tggattcaac ttctgggtctc tactatgact gttcagccca 240
t 241

<210> 126

<211> 228

<212> DNA

<213> Glycine max

<400> 126

agtatcgaga gcttgctaac cgagttgatg aggctcttgg attcatggct gctgctgggc 60
tcacagtgga ccatcccata atgagaacaa ctgaattctg gacatctcat gagtgcattat 120
tgttgcccta tgaacaatcc ctcaccagggt tggattcaac ttctgggtctc tactatgact 180
gttcagccca tatgctctgg gttggggaac gaaccaggca gcttgatg 228

<210> 127

<211> 253

<212> DNA

<213> Glycine max

<400> 127

ttcagtggaa tttggacttc acggatcaca gcgaacaggg agataggtac cgagagcttg 60
ctaaccgagt tgatgaggcc cttggattca tggctgctgc tgggctcacg gtggaccatc 120
ccataatgag aacaactgaa ttctggacat ctcatgagtg cttattgttg ctttatgaac 180
aatccctcac aaggttggat tcaacttctg gtctctacta tgactgttca gcccatatga 240
tctgggttgg aga 253

<210> 128

<211> 289

<212> DNA

<213> Glycine max

<400> 128

tacggctgcg agaagacgac agaaagggag gtaccgagag cttgctaacc gagttgatga 60
ggcccttgga ttcatggctg ctgctgggct cacgggtggac catcccataa tgagaacaac 120
tgaattctgg acatctcatg agtgcttatt gttgcattat gaacaatccc tcacaagggtt 180
ggattcaact tctgggtctc actatgactg ttcagcccat atgatctggg ttggagaacg 240
aaccaggcag cttgatgggtg cccatgttga gtttctaaga ggagttgct 289

<210> 129

<211> 295

<212> DNA

<213> Glycine max

<223> unsure at all n locations

<400> 129

gaaccaggca gcttgatggg gcccatgttg agtttctaag aggagttgct aatcccttgg 60
gaattaagggt aagtgacaag atggatccaa atgagctagt taaactcatt gagatcttga 120
atcctcaaaa caaagcagga agaattactg tgatcacngg atgggagctg aaaatatgag 180
ggtgaagctt ccacatctca tcagggcagt gcgcagagca ggccaaattg tcacttgggt 240
cagtgatcct atgcatggaa acaccattaa ggctccctgt ggtcttaaaa ctgcg 295

<210> 130
<211> 269
<212> DNA
<213> Glycine max

<400> 130

ttccacatct catcagggca gtgcgcagag caggccaaat tgtcacttgg gtcagtgatc 60
ctatgcatgg aaacaccatt aaggctccct gtggtcttaa aactcgcccc ttcgattcca 120
tcagggccga agtgagagca ttcttcgacg tacacgagca agaaggaagc caccagggag 180
gggttcatct agagatgacg ggtcagaatg tgaccgagtg cattgggtggg tcaaggacgg 240
tcacatttga tgacttgagc tcacgttac 269

<210> 131
<211> 269
<212> DNA
<213> Glycine max

<400> 131

gaacaactga attctggaca tctcatgagt gcttattgtt gccttatgaa caatccctca 60
ccagggttga ttcaacttct ggtctctact atgactgttc agcccatatg ctctggggtg 120
gggaacgaac caggcagctt gatggtgccc atgtcgagtt tctaagagga gttgctaate 180
ccttgggaat taaggttaagt gacaagatgg atccaaatga gcttggttaga ctcatgaga 240
tcttgaatcc ccaaaacaaa ccagggaga 269

<210> 132
<211> 259
<212> DNA
<213> Glycine max

<400> 132

cggtctgagt gaaaatatga ggggtgaagct tccacatctc atcagggcag tgcgcagagc 60
aggccaaatt gtcacttggg tcagtgatcc tatgcatgga aacaccatta aggctccctg 120
tggtcttaaa actcgccctc tcgattccat cagggccgaa gtgagagcat tcttcgacgt 180
acacgatcaa gaaggaagcc acccaggagg ggttcattcta gagatgacgg gtcagaatgt 240
gacctagtgc attggtggg 259

<210> 133
<211> 243
<212> DNA
<213> Glycine max

<400> 133

tggacatctc atgagtgctt attgttgctt tatgaacaat ccctcaccag gttggattca 60
acttctggtc tctactatga ctgttcagcc catatgctct gggttgggga acgaaccagg 120
cagcttgatg gtgcccattg cgagtttcta agaggagttg ctaatccctt gggaattaag 180
gtaagtgaca agatggatcc aaatgagctt gttagactca ttgagatctt gaatccccaa 240
aac 243

<210> 134
<211> 294
<212> DNA
<213> Glycine max
<223> unsure at all n locations
<400> 134

gagcttggtta gactcantgn natcttgaat ccccaaaaca aaccagggag nataactgtg 60
attacnanga tgggagctgn aaatatgagg gtgaagcttc cacatcttca tcagggcagt 120
gcgcagagca gggcaaattg tcacctgggt cagtgatcta tgcattggaaa caccattaag 180
gctccatgng gtcttaaaac ttcgccccctt cgattcatca gggctgaagt gagagcattc 240
tttgnngtgc acgagcaaga aggaagccac ccagganggg ttcatctaga gatg 294

<210> 135
<211> 278
<212> DNA
<213> Glycine max

<400> 135

gttgagaaga gagaatggct gtggcgctgt catcatccct tatcacgttg aaggtgaaac 60
cttgcatctt cgggtctcct cggagatccg cgggtggttcg gaattgtgcg aagtcaacgg 120
cggggacaat atcgacgagt tggagcctgg acagctggag ggcgaagaag gcgcttcagc 180
ttccggagta ccagatgcg aatgaattgg acctagtcct ccaaaccctc tcttcttttc 240
ccccaatcgt cttcgcgggc gagggcgagga atctggag 278

<210> 136

<211> 254

<212> DNA

<213> Glycine max

<400> 136

atcttgttga gaagagagaa tggctgtggc gtgcgtcatca tcccttatca cgttgaaggt 60
gaaaccttgc atcttcgggt ctccctggag atccgcgggtg gttcgggaatt gtgcgaagtc 120
aacggcggggg acaatatcga cgagttggag cctggacagc tggagggcgga agaaggcgct 180
tcagcttccg gactaccag atgcgaatga attggacctg gtccctccaa ccctctcttc 240
ttttccccc atcg 254

<210> 137

<211> 256

<212> DNA

<213> Glycine max

<400> 137

tgtttttttg ttgagaagag agaatggctg tggcgctgtc atcatccctt atcacgttga 60
aggtgaaacc ttgcattttc ggggtctcctc ggagatccgc ggtggttcgg aattgtgcga 120
agtcaacggc ggggacaata tcgacgagtt ggagcctgga cagctggagg gcgaagaagg 180
cgcttcagct tccggagtac ccagatgcga atgaattgga cctagtcctc caaacctct 240
cttcttttcc cccaat 256

<210> 138

<211> 245

<212> DNA

<213> Glycine max

<400> 138

ttttgttgag aagagagaat ggctgtggcg tcgtcatcat cccttatcac gttgaagggtg 60
aaaccttgca ttttcgggtc tcctcggaga tccgcgggtg ttcggaattg tgcgaagtca 120
acggcgggga caatatcgat cagttggagc ctggacagct ggagggcgaa gaaggcgctt 180
cagcttcggg agtaccaga tgcgaatgaa ttggacctag tcctccaaac cctctcttct 240
tttcc 245

<210> 139

<211> 240

<212> DNA

<213> Glycine max

<400> 139

tttgtttttt tgttgagaag agagaatggc tgtggcgctg tcatcatccc ttatcacgtt 60
gaagggtgaaa ccttgcatth tccgggtctcc tcggagatcc gcgggtgggtc ggaattgtgc 120
gaagtcaacg gcggggacaa tatcgacgag ttggagcctg gacagctgga gggcgaagaa 180
ggcgcttcag cttccggagt acccagatgc gaatgaattg gacctagtcc tccaaaccct 240

<210> 140

<211> 258

<212> DNA

<213> Glycine max

<223> unsure at all n locations

<400> 140

gtttttttgt tgagaagaga gaatggctgt ggcgtcgtca tcacccctta tcacgttgaa 60
ggtgaaacct tgcattttcg ggtctcctcg gagatccgcg gtggttcgga attgtggcga 120
agtcaacggc ggggacaata tcgacgagtt ggagcctgga cagctggagg gcgaagaagg 180
cgcttcagct tccggagtac ccagatgcga atgaattgga ctaatncttc aaaacnctct 240
cttctttccc ccaatngt 258

<210> 141

<211> 247

<212> DNA

<213> Glycine max

<400> 141

gttggtttgt ttttttgttg agaagagaga atggctgtgg cgtcgtcatc atcccttata 60
acgttgaagg tgaaacttgc attttcgggt ctctcggag atccgcggtg gttcgggaatt 120
gtgcgaagtc aacggcgggg acaatatcga cgagttggag cctggacagc tggagggcga 180
agaaggcgct tcagcttccg gagtaccag atgcgaatga attggaccta gtcctccaaa 240
ccctctc 247

<210> 142
<211> 251
<212> DNA
<213> Glycine max

<400> 142

ctcgagccga atcggtcga gggttttttg ttgagaagag agaacggctg tggcgtcgtc 60
atcatccctt atcacgttga cggtgaaacc ttgcattttc gggctctctc ggagatccgc 120
ggtaggttcg aattgtgcga agtcaacggc ggggacaata tcgacgagtt ggagcctgga 180
cagctggagg gcgaagaagg cgcttcagct tccggagtag ccagatgcga atgaattgga 240
cctagtcctc c 251

<210> 143
<211> 352
<212> DNA
<213> Glycine max

<400> 143

gaatggagtg acgctcccga gttacagggg tgataatgtg aatggcgatg catttgacgc 60
ggcatctaga atccccgatc cacagaggat gataagagcc tactgccaat ctgtgtctac 120
tctgaacctt ttgcgggcat ttgccacggg aggttatgct gccatgcaaa gggttaatca 180
atggaatctt gatttcatgg agcatagtga acaggagac aggtaccgtg aattagccca 240
tagagtggat gaggtctttg gcttcatgaa tgttgctggg ctacagccg accatcccat 300
catgagtaca acagaatttt ggacctcca tgagtgtttg cttctccctt at 352

<210> 144
<211> 239
<212> DNA
<213> Glycine max

<400> 144

caaagggtta atcaatggaa tcttgatttc atggagcata gtgaacaggg agacaggtac 60
cgtgaattag cccatagagt ggatgaggct cttggcttca tgaatgttgc tgggctcaca 120
gccgaccatc ccatcatgag tacaacagac ttttgacct cccatgagtg tttgcttctc 180
ccttatgagc aagcacttac tagggaggat tctactactg ggcttcatta tgattgctc 239

<210> 145

<211> 264

<212> DNA

<213> Glycine max

<400> 145

cagctggaag tcaaagaaag ccctgcagct gccgaatac ccgagccagg aggagctgga 60
gtccgtcttc aaaaccctcg aggccttttc tccaatcgtc ttcgccggtg aggccaggac 120
attggaggag catctcgccg aggccgccat gggaaatgcc ttcctcctcc agggcgagga 180
ctgtgctgag agcttcaagg agttcaatgc caacaacatc cgtgacacct tccgcatcat 240
cctccagatg agcgtcgtca tgat 264

<210> 146

<211> 223

<212> DNA

<213> Glycine max

<400> 146

acgaaatggg ccgtggacag ctggaagtca aagacagccc tgcagctgcc cgaatacccg 60
agccaggagg agctggagtc cgtcctcaaa accctcgagg cttttcctcc aatcgtcttc 120
gccggtgagg ccaggacatt ggaggagcat ctgccgagg ccgcatggg aaatgccttc 180
ctcctccagg gcggagactg tgctgagagc ttcaaggagt cat 223

<210> 147

<211> 224

<212> DNA

<213> Glycine max

<400> 147

ccaactaaagt ctgtactgtt agatattggt aaagagcgta aggaagcatg gaccagttgg 60

ttgaaagctt atatacatga ggtctctacc agtgggatac ctgatgacga aaggaagatc 120
 tcgatggatt cagtgaatcc taaatatata ctgaggaact atctctgcc aactgcaatt 180
 gatgctgcag aaataggtga ttttggagag gttcgcagcc tgct 224

<210> 148
 <211> 265
 <212> DNA
 <213> Glycine max

<400> 148

acggaagacg acagaagggg acgaaaggaa gatctcgatg gattcagtga atcctaaata 60
 tatactgagg aactatctct gccagactgc aattgatgct gcagaaatag gtgatttttg 120
 agaggttcgc agcctgctca aattagtga gcatccgtat gatgagcaac caggaatgga 180
 aaaatatgct cgcttgcccc cagcttgggc atatcgacca ggtgtatgca tgctttcttg 240
 ttcttcatga ggctccatt taggt 265

<210> 149
 <211> 276
 <212> DNA
 <213> Glycine max

<223> unsure at all n locations
 <400> 149

cccaggtcga agatactgtt ttccnaacca gcctgacatt ggtttgtgga atattgcaca 60
 gttcacaaca acactacaan ctgctcattt aataaatgan aaagaggcca actatgctat 120
 ggaaagatat ggaacgagat ttatggatga ttatcagggtt acaatgacca aaaagcttgg 180
 cctccctaag tataataagc agatgattaa taaacttctt agcaatatgg ctgttgacaa 240
 agttgattac acanacttct ttcgtacgct ttcaac 276

<210> 150
 <211> 266
 <212> DNA
 <213> Glycine max

<400> 150

gttttgcaaa ccagcctgac attggtttgt ggaatattgc acagttcaca acaacactac 60

aagctgctca ttttaataaat gaaaaagagg ccaactatgc tatggaaaga tatggaacga 120
gatttatgga tgattatcag gttacaatga ccaaaaaagct tggcctccct aagtataata 180
agcagatgat taataaaactt cttagcagta tggctgttga caaagttgat tacacaaact 240
tctttcgtac gctttcaaact gttaaa 266

<210> 151
<211> 392
<212> DNA
<213> Glycine max

<400> 151

gttcccgatg aacttggttaa gctgatagat attctgaacc ctaaaaacaa gcctggaaga 60
attacagtca ttgttagaat gggagctgag aatatgagag tgaagcttcc acatcttattc 120
agggcagttc gcagagcagg tcaaattgtc acttgggtta gtgaccccat gcatgggaac 180
accattaaag ctccatctgg acttaaaacc cgctcttttg atgcaataag ggctgagctg 240
agggcattct ttgatgtgca tgatcaagaa ggaagctacc caggaggggt tcatttagag 300
atgacagggc agaacgtgac agaatgtggt ggaggctcaa ggactattac ttatgatgac 360
ttgagctcac gctaccacac acattgtgat cc 392

<210> 152
<211> 359
<212> DNA
<213> Glycine max

<400> 152

ctgttttttt gctgagaaga gagaatggct gtggcgtggt catcatccct taccacgttg 60
aaggtgaaac cttgcatttt cgggtctcct cgagatccg cgggtggatcg gaattgtgag 120
aagtcacagg cggggacaat atcgacgagt tggagcctgg acagttggag ggcgaagaag 180
gagcttcagc ttccggagta cccagatgag gaaagatgaa ttggacctag tccttcaaac 240
cctatgttct tttcccccaa tcgtcttcgg cggcgaggcg aggaatctgg aggagaagct 300
agctcaggct gccatgggga acgcttatct gcttcagggc ggtgattgag ccgagagct 359

<210> 153
<211> 167
<212> DNA

<213> Zea mays

<400> 153

gcggattcat ctgtaggcgg gaaaacgggg attaaccacc cactagggaa gaacttgatt 60
ggacgattct catcagccac aatgtgttct aattgacaca gctacactga acacattgcc 120
tgacagggag ctagcctcag gcattgccga ggtagtgaag tatgggc 167

<210> 154

<211> 235

<212> DNA

<213> Zea mays

<400> 154

cggatatgga gcatggctcc atggggaggc tgtcgcagct ggaacagtta tggcaactga 60
catgtctcac cgctgggggt ggatagatga ctccatcaga aaacgtgtgg ttgacatact 120
aaagcaagcc aaacttccca ttgcacctcc tgagaccatg accgtagaga agtttaaaaa 180
catcatggct gttgacaaga aggttgctga tgggtctgtg agactcatcc ttctg 235

<210> 155

<211> 248

<212> DNA

<213> Zea mays

<400> 155

aagaggggttc tgggtggtgac caacacgacc gtcgcgcgcg tttacctgga caaggtgaca 60
tgggcactca cccacaacaa cctgaatgta tcagtggaaa gcgtgatcct gcccgacggc 120
gaaaagtaca aaaatatgga cacgctgatg aaggtgtttg acaaggcagt cgagtcccgt 180
tttgaccgcc ggtgcacatt tgtagcactg ggtggtggtg tcattgggga catgtgtggt 240
tttgcagc 248

<210> 156

<211> 284

<212> DNA

<213> Zea mays

<400> 156

ggcatgttca tggttaagagg gttctggtgg tgaccaacac gaccgtcgcg ccgctttacc 60

tggacaaggt gacatgggca ctcaccacaca acaacctgaa tgtatcagtg gaaagcgtga 120
 tcctgcccga cgggtgaaaag tacaaaaata tggacacgct gatgaagggtg ttgacaagg 180
 cagtcgagtc ccgttttgac cgccgggtgca catttgtagc actgggtggt ggtgtcattg 240
 gggacatgtg tggttttgca gctgctgcat tcctccgggg cgtc 284

<210> 157

<211> 473

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<400> 157

gtggagttgc acgtcttcgc agccacgggc tagtaatccg gctcgccnca cgcgtcaggc 60
 tgaagtgggtg gcacaagatg agaaggaaaag tggccttcga gcaacactaa acctgggtca 120
 cacatttggc catgctattg agactgggac aggatatgga gcatggctcc atggggaggc 180
 tgtcgcagct ggaacagtta tggcaactga catgtctcac cgctgggggt ggatagatga 240
 ctccatcaga aaacgtgtgg ttgacatact aaagcaagcc aaacttccca ttgcacctcc 300
 tgagaccatg accgtagaga agtttaaaaa catcatggct gttgacaaga aggttgctga 360
 tgggtctgttg agactcatcc ttctgaaagg accgctangg tgctgtgtat ttacggggga 420
 ttatgacggg aatgcactcg atgaaaccta catgcattct gcgacaactg aga 473

<210> 158

<211> 182

<212> DNA

<213> Zea mays

<400> 158

cggacgctgg gcggacgcgt gggggcagat agggccagac actaaggctt ttggtataat 60
 tggtaaacca gttggccata gcaaaagccc aattttgcat aatgaagctt tcagatcagt 120
 gggtttcaac gctgtgtatg ttccattttt ggtggatgac ttggctaaat ttcttgatac 180
 at 182

<210> 159

<211> 251

<212> DNA

<213> Zea mays

<400> 159

gcttaagggtg gctgacaaat ttatgaaact tatttctggg aggaaacctg ataactgtaa 60
acttatagtt tcatcccaca actatgagac cactccatcg tccgaggaac ttgcaaattt 120
ggtggctcag attcaagcaa cgggggctga tatcgtgaaa atagctacaa ccgctactga 180
aattgttgat gtggcaaaaa tgtttcaaat acttgttcac tgccaggaaa agcaggtgcc 240
aatcattggg c 251

<210> 160

<211> 251

<212> DNA

<213> Glycine max

<400> 160

caacgctttg tctaccgctc cggcagcggg tagtaggaag aacgcgacgc taatttgcgt 60
cccaataatg ggagaatcag ttgaaaagat ggagattgac gtggacaaaag cgaaagccgg 120
aggcgcggac cttgttgaaa ttcgattgga ttctttgaaa acctttgacc cctatcgaga 180
tctcaacgct ttcattcaac accgttcttt acccttggtg ttcacttaca ggcccaaattg 240
ggagggtggt a 251

<210> 161

<211> 225

<212> DNA

<213> Zea mays

<400> 161

attgttgga tgatgggttc aggcaaaact acagttggga agatattatc cgaagtgtta 60
ggttattcgt tcttcgacag tgataagttg gtagagaagg ctggttggtat ttcattctgtt 120
gctgagatct ttcagctcca tagcgaaaca ttcttcagag ataattgagga gttacatgaa 180
gaaagggtc accgtatggt tagatgtccc actggatgca cttgc 225

<210> 162

<211> 297

<212> DNA

<213> Zea mays

<400> 162

cagttgcccc aatattcaag gtccatagtg aagccttctt tcgggataat gagagtagtg 60
tcttgagaga tttgtcctcc atgcgacgat tagttgttgc caccggaggt gatgctgtta 120
tccgaccaat taactggaga tatatgaaga ggggcctatc tgtttggtta gatgtgccct 180
tggtatgctct tgctaggcgt attgctaaag tgggaactgc ctctcgtcct cttctggacc 240
aaccatctgg tgatccgtac gcaatggtag ctacttggtc ttgttccttc aaattct 297

<210> 163
<211> 249
<212> DNA
<213> Zea mays

<400> 163

ttcacaagct gttggaatcc cttcagttgc tcaaatatc aaagttcaca gtgaagcctt 60
ctttcgggat aattggagta gcgctttcag ggatctgtcc tccatgacgac gattagttgt 120
tgccacggag gtgttctgtc atccgaccag ttaactggac atatatgaag atgggcctat 180
ccgtttggtt agatgtgccc ttagatgctc ttgctaggcg tattactaaa gtgggaccgc 240
ttctcgtcc 249

<210> 164
<211> 334
<212> DNA
<213> Zea mays

<400> 164

gaaatatatg aagaagggcc tatccgtttg gttagatgtg cccttggtatg ctcttgctag 60
gcgcattgct aaagtgggaa ccgcttctcg tcctcttctg gaccaaccgt ccggtgatcc 120
atacacaatg gtagctactt attctttcaa tattctttca tgctcgtgaa acggaattgt 180
ttcttttttc tatttggaca aagaactgct catagatcca cttgagcctt gaagccctat 240
cctggattcc agtcctttac ttgtggtagc aaatgctcag acttcttatg ctagttctaa 300
tatggatcac tcaactgggtt ccttattggt atag 334

<210> 165
<211> 273
<212> DNA
<213> Zea mays

<400> 165

atttacctag taggaatgat gggttctgga aaaagtactg tggggaagat tatgtctgaa 60
gtcttgggtt attcgttctt tgatagtac aagttagtgg agcaagctgt tggaaatgcca 120
tcagttgccc aaatattcaa ggtccatagt gaagccttct ttcgggataa tgagagtagt 180
gtcttgagag atttgtctc catgcgacga ttagttgttg ccaccggagt ggtgcctggt 240
atccgaccaa ttaactggag atatatgaag agg 273

<210> 166

<211> 298

<212> DNA

<213> Zea mays

<400> 166

gatgggttct ggaaaaagta ctgtggggaa gatcatgtct gaagtcttgg gttattcgtt 60
ctttgatagt gacaaattag tggagcaagc tgttggaatg ccttcagttg ctcaaattatt 120
caaagttcac agtgaagcct tctttcggga taatgagagt agcgtcttga gggatctgtc 180
ctccatgcga cgattagttg ttgccaccgg agtgggtgctg tcatccgacc agttaactgg 240
aaatatatga agaagggcct atccgtttgg ttagatgtgc ccttggatgc tcttgcta 298

<210> 167

<211> 297

<212> DNA

<213> Zea mays

<400> 167

agaagttctg ttctacttaa acgggaggtg tatttactta gtgggaatga tgggttctgg 60
aaaaagtact gtggggaaga tcatgtctga agtcttgggt tattcgttct ttgatagtga 120
caaattagtg gagcaagctg ttggaatgcc ttcagttgct caaatattca aagttcacag 180
tgaagccttc tttcgggata atgagagtag cgtcttgagg gatctgtcct ccatgcgacg 240
attagttggt gccaccggag gtgggtgctgt catccgacca gttaaactgg aatatat 297

<210> 168

<211> 231

<212> DNA

<213> Zea mays

<400> 168

gaagctctcc tgttgaagag aaaatcagaa gaagttctgt tctacttaaa cgggaggtgt 60
atttacttag tgggaatgat gggttctgga aaaagtactg tggggaagat catgtctgaa 120
gtcttggggt attcgttctt tgatagtac aaattagtgg agcaagctgt tggaatgcct 180
tcagttgctc aaatattcaa agttcacagt gaagccttct ttcgggataa t 231

<210> 169

<211> 274

<212> DNA

<213> Zea mays

<400> 169

cccacgcgtc cggccacgcg tccgggaaga tcatgtctga agtcttgggt tattcgttct 60
ttgatagtga caaattagtg gagcaagctg ttggaatgcc ttcagttgct caaatattca 120
aagttcacag tgaagccttc tttcgggata atgagagtag cgtcttgagg gatctgtcct 180
ccatgcgacg attagttggt gccaccggag ggggtgctgt catccgacca gttaactgga 240
aatatatgaa gaagggccta tccgtttggt taga 274

<210> 170

<211> 294

<212> DNA

<213> Zea mays

<400> 170

tgttcaggca aaactacagt tgggaagata ctatccgaag tgtaggtta ttcgttcttc 60
gacagtgata agttggtaga gaaggctgtt ggtatttcat ctgttgctga gatctttcag 120
ctccatagcg aaacattctt cagagataat gagagtgagg tcctgacgga tctgtcatca 180
atgcatcggg tgggttgttc aacctggagt ggtgcagtga tccgaccaat caattggagt 240
tacatgaaga aagggctgac cgtatgggta gatgtccac tggatgcact tgca 294

<210> 171

<211> 261

<212> DNA

<213> Zea mays

<400> 171

atccgaccaa tcaattggag ttacatgaag aaagggctga ccgtatgggt agatgtccca 60
 ctggatgcac ttgcaagaag aatcgctgct gtaggaaccg cgtctcgacc actottgcat 120
 caggaatccg gtgacacctt tgcaaaggct tatgcaaaac ttacgtcact ttttgagcaa 180
 agaatggact cgtatgctaa tgctgatgcc agagtttcac ttgaacatat tgcattaaaa 240
 caaggccata atgatgtcac t 261

<210> 172
 <211> 289
 <212> DNA
 <213> Zea mays

<400> 172

agtgagggtcc tgacggatct gtcacatgaatg catcggttgg ttgttgcaac cggagggtggt 60
 gcagtgatcc gaccaatcaa ttggagttac atgaagaaag ggctgaccgt atgggttagat 120
 gtccactgg atgcacttgc aagaagaatc gctgctgtag gaaccgcgtc tcgaccactc 180
 ttgcatcagg aatccgggtga tccttatgca aaggcttatg caaaacttac gtcacttttt 240
 gagcaaagaa tggactcgta tgctaattgct gatgccagag tttcacttg 289

<210> 173
 <211> 317
 <212> DNA
 <213> Zea mays

<400> 173

ctatccgaag tgtaggtta ttcgtttctc gacagtgata agttggtaga gaaggctggt 60
 ggtatttcat ctgttgctga gatctttcag ctccatagcg aaacattctt cagagataat 120
 gaggagttac atgaagaaag ggctgaccgt atgggttagat gtccactgg atgcacttgc 180
 aagaagaatc gctgctgtag gaaccgcgtc tcgaccactc ttgcatcagg aatccgggtga 240
 tccttatgca aaggcttatg caaaacttac gtcacttttt gagcaaagaa tggactcgta 300
 tgctaattgct gatgcca 317

<210> 174
 <211> 231
 <212> DNA
 <213> Zea mays

<400> 174

ggcatgacta cagttgggaa gatactatcc gaagtgttag gttattcggt cttcgacagt 60
gataagttgg tagagaaggc tttggtatct catctgttgc tgagatcttt cagctccata 120
gcgaaacatt cttcagagat aatgagagtg aggtcctgac ggatctgtca tcaatgcac 180
ggttggttgt tgcaaccgga ggtggtgcag tgatccgacc aatcattgga g 231

<210> 175

<211> 241

<212> DNA

<213> Zea mays

<400> 175

gtccactgg atgcacttgc aagaagaatc gctgctgtag gaaccgcgtc tcgaccactc 60
ttgcatcagg aatccggtga tccttatgca aaggcttatg caaaacttac gtcacttttt 120
gagcaaagaa tggactcgta tgctaagtct gatgccagag ttctacttga acatattgca 180
ttaaacaag gccataatga tgtcactata cttacaccta gtaccatcgc cattgaggca 240
t 241

<210> 176

<211> 337

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<400> 176

cctccatgcy acgattagtt gttgccaccg gaggtgtgct gttatccgac caattaactg 60
gagatatatg aagagggggc tatctgtttg gtagatgtg cccttggatg ctcttgctag 120
gcgtattgct aaagtgggaa ctgcctctcg tcctcttctg gaccaaccat ctggtgatcc 180
gtacgcaatg gccttttcta agctcagcat gcttgcacag caaaggggtg atgcttatgc 240
aaatgcagat gtaaggggtt ctctggaaga gattgcatgt anacaaggct atgatgatgt 300
ctctaagctg acacctactg atattgcaat tgagtca 337

<210> 177

<211> 360

<212> DNA

<213> Zea mays

<400> 177

gaagggccta tccgtttggt tagatgtgcc cttggatgct cttgctaggc gcattgctaa 60
agtgggaacc gcttctcgtc ctcttctgga ccaaacgtcc ggtgatccat acacaatggc 120
cttttctaag ctcagcatgc ttgcagagca aaggggtgat gcttatgcaa atgcggatgt 180
aagggtttct ctggaagaga ttgcatctaa acaaggatcat ggcatgtct ctaagctgat 240
gccgactgat atcgcaattg agtcacttca taagatcgag agtttcgtca tcgagcacgc 300
tgctgataat ccagctagcg actcgcaagc tgagtcacag atccaaggat acagacttgt 360

<210> 178

<211> 460

<212> DNA

<213> Zea mays

<400> 178

aggggtgtgag aatgggtcat ggagcacggt cggatatcgg gtcagccccg cgtctgcgca 60
gaagtctgcc gacgcgtggg ggaaaacgcc aatctatatt gttggtacgg attgcacagc 120
caagcgcaac atcgccaagc tgcttgcgaa ttccataata taccgctacc tcagcagtga 180
ggaactgctt gaggatgttc ttggtggcaa ggacgccctc agagccttca aggaatctga 240
tgagaacggt tatcttgaag tcgagacgga agggttaaag cagctcacgt ccatgggtag 300
ccttgtagtg tgctgtggag atggcgccgt tatgaactca accaatctag ggctgctgag 360
gcatggtgtc tccatttgga ttgatgttcc tcttgaaatg gcagcaaatg acatgttgaa 420
gagcactgga acacaagcta ctacagatcc agactctttt 460

<210> 179

<211> 434

<212> DNA

<213> Zea mays

<400> 179

aaggccact actctgctga tgacgtctc atactacagc aaaaagcca ggatgttctg 60
ccttacttgg atggccgttg cgtttatctt gttggaatga tgggttcagg caaaactaca 120
gttgggaaga tactatccga agtgtaggt tattcgttct tcgacagtga taagttggta 180

gagaaggctg ttggtatttc atctgttgct gagatctttc agtccatag cgaaacattc 240
 ttcagagata atgagagtga ggtcctgagg gatctgtcat caatgcatcg gttggttggt 300
 gcaaccggag gtggtgcagt gatccgacca atcaattgga gttacatgaa gaaagggctg 360
 accgtatggg tagatgtccc actggatgca cttgcaagaa gaattgctgc tgtaggaacc 420
 gcgtctcgac cact 434

<210> 180
 <211> 281
 <212> DNA
 <213> Glycine max
 <223> unsure at all n locations
 <400> 180

cttgttgnta atgatggcct ctgggaagac aactngggac gganattgtc agaggcgctt 60
 tcttattcgt tttannatag tgatgcattg gtggtgaagg aggttggtgg aatatctgta 120
 actgatatat tcaagcacta tggagagcct tttttcgtaa taaggagatn gaggtgttgc 180
 agaagggtgc aataatggca tagacatctt atttctactg gtggangtgc gtcgtgaggc 240
 ccatcattgg aaatatatgc agcaggggat tagtgtttgg t 281

<210> 181
 <211> 271
 <212> DNA
 <213> Glycine max
 <400> 181

ttcaagcact atggagagcc tttttttcgt aataaggaga ctgagggtgtt gcagaagggtg 60
 tcaataatgc atagacatct tatttctact ggtggagggtg ctgtcgtgag gcccatcaat 120
 tggaaatata tgcagcaggg gattagtgtt tggttggatg tacctgtaga agtcttgact 180
 cagagaataa cagctgaagg aactgattct cgcccacttc tacattatga aggaggagat 240
 gcatacacia agactatcac gcatttgtct t 271

<210> 182
 <211> 283
 <212> DNA
 <213> Glycine max
 <223> unsure at all n locations

<400> 182

cagtatcaga cggcacggtt tcgtcttcgc ttggtgccac ggactcgtct cttgcggtga 60
agttttttgtt cagaagaaag cagcagaggt gtcttctgag ctcaaaggga cctccatatt 120
tctggttggt ttgaagagct ctcttaaact agtttgggga agctgctggc tgatgcattg 180
cggtattatt atttcgacag tgatagtttg gtggaagaag cngtaggtgg tgcactggct 240
gcaaaatcat tcagagagag tgacgaaaaa ggcttctatg agt 283

<210> 183

<211> 414

<212> DNA

<213> Glycine max

<400> 183

aatgcacctt ccaattttct tcaattcaag caccaaaact gcttctgaa gttcccgaac 60
ccaaacctcc atcgactgcg caggctcaat tgctcagtat cagacggcac cgtttcgtct 120
tcgcttggtg ccacggactc gtctcttgcg gtgaagaaga aagcagcaga ggtgtcttct 180
gagctcaaag ggacctccat atttctggtt ggtttgaaga gctctcttaa aactagtttg 240
gggaagctgc tggctgatgc attgcggtat tattatttcg acagtgatag tttggtggaa 300
gaagctgtac gtggtgcact ggctgcaaaa tcattcagag agagtgcga aaaaggcttc 360
tatgagtctg agactgaagt actgaagcaa ttatcgttca tgggtcgact agtg 414

<210> 184

<211> 244

<212> DNA

<213> Glycine max

<400> 184

tgcttttgtt gaaggatgatg cttcaagtgc cagttacttc ctagctggtg cagcagtaac 60
tggtgggact atcactgtta atggctgtgg cacaagcagt ttacaggag atgtaaaatt 120
tgctgaagtt cttgaaaaga tgggagctaa ggttacatgg tcagagaaca gtgtcacctg 180
tactggaccg ccacaagatt cttctggtca aaaagtcttg caaggcattg atgtcaatat 240
gaac 244

<210> 185

<211> 262
<212> DNA
<213> Glycine max

<400> 185

ggtttctgca tcggtcgccg ccgcagagaa gccgtcaacg tcgccggaga tcgtgctgga 60
acccatcaaa gacttctcgg gtaccatcac attgccaggg tccaagtctc tgtccaatcg 120
aattttgctt cttgctgctc tctctgaggg aacaactgtt gtagacaact tgttgtatag 180
tgaggatatt cattacatgc ttggtgcatt aaggaccctt ggactgcgtg tggaagatga 240
caaaacaacc aaacaagcaa tt 262

<210> 186
<211> 234
<212> DNA
<213> Glycine max

<400> 186

tgctgtacag cgaggatatt cattacatgc ttggtgcatt aaggaccctt ggactgcgtg 60
tggaagacga ccaaacaacc aaacaagcaa ttgtggaagg ctgtggggga ttgtttccca 120
ctattaaaga atctaaagat gaaatcaatt tattccttgg aagtgctggt actgcgatgc 180
gtcctttgac agcagctgta gttgctgcag gtggaaatgc aagctacgta cttg 234

<210> 187
<211> 280
<212> DNA
<213> Glycine max

<400> 187

gttggaacc tatcaaagac atctcgggta ccacacatt gccagggtct aagtctctgt 60
ccaatcgaat ttgcttctt gctgctctct ctgagggaac aactgttgta gacaacttgc 120
tgtacagcga ggatattcat tacatgcttg gtgcattaag gacccttgga ctgcgtgtgg 180
aagacgacca aacaaccaa caagcaattg tggaaggctg tgggggattg tttcccacta 240
ttaaagaatc taaagatgaa atcaatttat tccttgga 280

<210> 188
<211> 239
<212> DNA

<213> Glycine max

<400> 188

cccacgcctt tggggggcct caaaatctcg catcccgatg cataaaaatg gaagctttat 60
gggaaatttt aatgtgggga acggaaattc cggcgtgttt aaggtttctg catcggtcgc 120
cgccgcagag aagccgtcaa cgtcgccgga gatcgtgttg gaacccatca aagacttctc 180
gggtaccatc acattgccag ggtccaagtc tctgtccaat cgaattttgc ttcttgctg 239

<210> 189

<211> 256

<212> DNA

<213> Glycine max

<400> 189

cagctcgggtg cagatgttga ttgctttctt ggcacaaact gtccacctgt tcgtgtaaat 60
gggaaggagg gacttcctgg cggaaagggtg aaactgtctg gatcaattag cagtcaatac 120
ctaactgctt tgcttatggc agctccttta gctcttggcg acgtggaaat tgagattgtt 180
gataaactga tttctgttcc atatgttgaa atgactctga agttgatgga gcgttttgga 240
gtttctgtgg aacaca 256

<210> 190

<211> 263

<212> DNA

<213> Glycine max

<223> unsure at all n locations

<400> 190

caggttcaaa ccggagcaaa aaaacttggt acgatgggtt cttccgacaa ggatccaccn 60
ttgacancan ctgtgggtgc tgcagggtga aatgcaagct acgtacttga tggggtgccc 120
cgaatgagag agaggccaat tggggatttg gttgctggtc ttaanccgtt atnactcaaa 180
ccgagaccga aactgacgga gccaccatcg tcgacgtcgc cgtcgccgtc aacgtcaacg 240
tcaacgtnaa cgacgagaat tac 263

<210> 191

<211> 255

<212> DNA

<213> Glycine max

<400> 191

ctgcaatgcg tcctttgaca gcagctgtgg ttgctgcagg tggaaatgca agctacgtac 60
ttgatgggggt gccccgaatg agagagaggc caattgggga tttggttgct ggtcttaagc 120
aacttggtgc agatgttgat tgctttcttg gcacaaactg tccacctgtt cgtgtaaact 180
ggaagggagg acttcctggc ggaaagggtga aactgtctgg atcagttagc agtcaatact 240
tgactgcttt gctta 255

<210> 192

<211> 262

<212> DNA

<213> Glycine max

<400> 192

gcaatgcgtc ctttgacagc agctgtgggt gctgcagggt gaaatgcaag ctacgtactt 60
gatgggggtgc cccgaatgag agagaggcca attggggatt tggtagctgg tcttaagcaa 120
cttggtgcag atgttgattg ctttcttggc acaaactgtc cacctgttcg tgtaaatggg 180
aagggaggac ttcctggcgg aaagggtgaaa ctgtctggat cagttagcag tcaatacttg 240
actgctttgc ttatggcagc tc 262

<210> 193

<211> 260

<212> DNA

<213> Glycine max

<400> 193

gggagctaag gttacatggt cagagaacag tgtcactgtt tctggaccac cacgagattt 60
ttctggtcga aaagtcttgc gaggcattga tgtcaatatg aacaagatgc cagatgttgc 120
catgacactt gctgttggtg cactatttgc taatgggtccc actgtataa gagatgtggc 180
aagttggaga gttaaagaga ctgagaggat gatagcaatc tgcacagaac tcagaaaagct 240
aggagcaaca gttgaagaag 260

<210> 194

<211> 271

<212> DNA

<213> Glycine max

<400> 194

gggagctaag gttacatggt cagagaacag tgtcactgtt tctggaccac cagagattt 60
ttctggtcga aaagtcttgc gaggcattga tgtcaatatg aacaagatgc cagatgttac 120
catgacactt gctgttggtg actatttgct aatgggccca ctgctataag agatgtggca 180
agttggagag ttaaagagac tgagaggatg atagcaatct gcacagaact cagaaagcta 240
ggagcaacag ttgaagaagg tcctgattac t 271

<210> 195

<211> 305

<212> DNA

<213> Glycine max

<223> unsure at all n locations

<400> 195

ctgatttctg ttccatatgt tganatgact ctgaagttga tggagcgttt tggagtttct 60
gtggaacaca gtggttaattg ggatagggtc ttggtccatg gaggtcaaaa gtacaagtct 120
cctggcaatg cttttgttga aggtgatgct tcaagtgccca ttatttacta gctggtgcag 180
caattactgg tgggactatc actgttaatg gctgtggcac aagcagttta cagggagatg 240
taaaatttgc tgaagttctt gaaaagatgg gagctaaggt tacatggtca gagaacagtg 300
tcact 305

<210> 196

<211> 280

<212> DNA

<213> Glycine max

<223> unsure at all n locations

<400> 196

gaaattgaga ttgttgataa actgatttct gttccatatg ttgaaatgac tctgaagntg 60
atggagcgtt ttngagtttc tgtggaacac agtggttaatt gggatagggt cttggtccat 120
ggaggtcana agtacaagtc tcctggnaat gcttttggtg aaggtgatgc ttcaagtgcn 180
agttatttac tanctggtgc agcaantact gnngggacta tcactgttna tggctgtggc 240
acaaacagtt tacagggaga tgtaaaattt gcngnagttc 280

<210> 197
 <211> 280
 <212> DNA
 <213> Glycine max

<400> 197

gtttagcagtc aatacttgac tgctttgctt atggcagctc ctttagctct tggatgatgtg 60
 gaaattgagc attgttgata aactgatacc tgttccatat gttgaacatg actctgaagt 120
 tgatggagcg ttttgaggtt tctgtggaac acagtggtaa ttgggatagg ttcttggtcc 180
 atggagggtca aaagtacaag tctcctggca atgcttttgt tgaaggatgat gcttcaagt 240
 ccagttcttt actagctggt gcagcaatta ctggtgggat 280

<210> 198
 <211> 136
 <212> DNA
 <213> Glycine max

<400> 198

gttgaaatga ctctgaagtt gatggagcgt tttggagttt ctgtggaaca cagtcgtaat 60
 tgggataagt tcttggtcca tggagggtcaa aagtacaagt ctctggcaa tgcttttgtt 120
 gaaggatgatg cttcaa 136

<210> 199
 <211> 331
 <212> DNA
 <213> Zea mays

<400> 199

atcccagcct cggtcgtatc atcaactgca agctccggca tccccaggat ttgatcctat 60
 ctcttctaaa tagccgtgtt cctccatttt acgctcaccg atcatcaa at tctccaag 120
 ccatcatgtc gaccttcgga acactctttc gcgttactac ctacggtgaa tctcactgtg 180
 cctcggtcgg ctgcattgtc gacggcggtc ctccaggcct caaactcact gctcctgaca 240
 ttcaagtgca gcttagccgt cgacgacctg gtcagagcaa tttgaccact ccccgaaacg 300
 agaaggacct tgtcaacatc cagtcggag t 331

<210> 200
 <211> 305

<212> DNA
<213> Zea mays

<400> 200

cttcattagc tcatccaatc tattccgatg acgaccgtgc ccacgccaca gcaggtggcg 60
cactcacggg ctcggtctgc accccgcgcg atcggcgccct tgctggagtt tgccccagcc 120
tctctctccc tccgcttcgc cgtgcaccgc tgccgcactg ctgcctaga ggtgaaggca 180
tctggaaaca cgtttgaaa ctactttcag gttgcaacct atggtgaatc tcatgggggt 240
ggtgttggtt gtgttatcag tggttgccac ctagaattca ctactgagg cagactacaa 300
gttga 305

<210> 201
<211> 303
<212> DNA
<213> Zea mays

<400> 201

cagcttcgtc tctctcgccg gcgcggcaac tatcatcact tcattagctc atccaatcta 60
ttccgatgac gaccgtgccc acgccacagc aggtgggtac tcacgggcac ggctcgcacc 120
ccgcgcgacg ggcgccttgc tggagtttgc cccagcctcc tctctctccc gcttcgccgt 180
gcaccgctgc cgcactgctc gcctagaggt gaaggcatct ggaaacacgt ttggaaacta 240
ctttcaggtt gcaacttatg gtgaatctca tgggggtggt gttggctgtg ttatcagtgg 300
ttg 303

<210> 202
<211> 285
<212> DNA
<213> Zea mays

<400> 202

ctcagcttcg tctctctcgc cggcgcggca actatcatca cttcattagc tcatccaatc 60
tattccgatg acgaccgtgc tcacgccaca gcaggtggcg tactcacggg cacggctcgc 120
acccgcgcgc atcggcgccct tgctggagtt tgccccagcc tctctctccc tccgcttcgc 180
cgtgcaccgc tgccgcactg ctgcctaga ggtgaaggca tctggaaaca cgtatggaaa 240
ctactttcag gttgcaactt atggtgaatc tcatgggggt ggtgt 285

<210> 203
 <211> 302
 <212> DNA
 <213> Zea mays

<400> 203

gatgggatga ctactggtac accaattcac gtctttgtcc caaacacaga tcaaaggggt 60
 ggtgattaca gtgaaatgtc taaggcgtac agaccatccc atgcagatgc aacctatgac 120
 ttcaagtatg gagttagagc tgtgcaggga ggtggaaggt catcagccag agaaaccatt 180
 ggcaggggtg ctgcaggagc tcttgcaaag aaaattctaa agctcaaata aggagtggag 240
 atcttggcat ttgtttctaa agtgcaccaa gtcttacttc cagaagatgc agttgattat 300
 ga 302

<210> 204
 <211> 304
 <212> DNA
 <213> Zea mays

<400> 204

cggaccgtgg ggcgaggtgg aaggatcatca gccagagaaa ccattggcag ggtggctgca 60
 ggagctcttg caaagaaaat tctaaagctc aaatcatcag tggagatctt ggcatttgtt 120
 tctaaagtgc accaagtcgt acttccagaa gatgcagttg attatgagac tgtaaccttg 180
 gaacatatag agagcaacat cgttagatgt cctgatccag aatatgcaga gaagatgatt 240
 gctgccattg atacggtacg agtttagagga gattcaattg gtggggctgt cacatgcatt 300
 gcaa 304

<210> 205
 <211> 301
 <212> DNA
 <213> Zea mays

<400> 205

tggagatctt ggcatttgtt tctaaagtgc accaagtcgt acttccagaa gatgcagttg 60
 attatgagac tgtaaccttg gaacatatag agagcaacat cgttagatgt cctgatccag 120
 aatatgcaga gaagatgatt gctgccattg atacggtacg agtttagagga gattcaattg 180

gtggggtcgt cacatgcatt gcaagaaatg ttctctgtgg tcttggtctt cctgtttttg 240
 acaaacttga agctgaactg gctaaagcca tgctttctct tcttgcaagc aaggggggtg 300
 a 301

<210> 206
 <211> 334
 <212> DNA
 <213> Zea mays

<400> 206

caataagctc gagctcgagc cgctcgagcc gtgcagatgc aacctatgac ttcaagtatg 60
 gagttagagc tgtagcaggg agacggaagg tcatcagcca gagaaaccat tggcaggggtg 120
 gctgcaggag ctcttgcaaa gaaaattota aagctcaaat caggagtgga gatcttggca 180
 tttgtttcta aagtgcacca agtcgtactt ccagaagatg cagttgatta tgagactgta 240
 accttgaac atatagagag caacatcggt agatgtcctg atccagaata tgcagagaag 300
 atgattgctg ccattgatac ggtacgagtt agag 334

<210> 207
 <211> 301
 <212> DNA
 <213> Zea mays

<400> 207

cggacgcgtg gatcagggaa tgtgttcggg aactacttcc aggttgcaac ctatggcgaa 60
 tcccatggag ggggtgttgg ttgcgttatc agtggctgcc caccagaat tcctctcact 120
 gaggcagaca tgcaagtaga actcgataga agacgtccgg gtcaaagtag aattacaacc 180
 ccaagaaagg agactgatac atgcaaaatt ctatcagga cacatgatgg gatgactact 240
 ggtacaccaa ttcacgtctt tgtcccaaac acagatcaaa ggggtggtga ttacagtga 300
 a 301

<210> 208
 <211> 254
 <212> DNA
 <213> Zea mays

<400> 208

cacacgcac cggtagaatt acaaccccaa gaaaggagac tgatacatgc aaaattctat 60
cagggacaca tgatgggatg actactggta caccaattca cgtctttgtc ccaaacacag 120
atcaaagggg tgggtgattac agtgaaatgt ctaaggcgta cagaccatcc catgcagatg 180
caacctatga cttcaagtat ggagttagag ctgtgcaggg aggtggaagg tcatcagcca 240
gagaaaccat tggc 254

<210> 209
<211> 232
<212> DNA
<213> Zea mays

<400> 209

ctaaagctca aatcaggagt ggagatcttg gcatttgttt ctaaagtgc ccaagtcgta 60
cttcagaag atgcagttga ttatgagact gtaaccttg aacatataga gagcaacatc 120
gttagatgtc ctgatccaga atatgcagag aagatgattg ctgccattga tacggtacga 180
gttagaggag attcaattgg tggggtcgtc acatgcattg caagaaatgt tc 232

<210> 210
<211> 277
<212> DNA
<213> Zea mays

<400> 210

cttcaggtt gcaacctatg gcgaatccat ggagggggtg ttggttgcgt tatcagtggc 60
tgcccacca gaattcctct cactgaggca gacatgcaag tagaactcga tagaagacgt 120
ccgggtcaaa gtagaattac aacccaaga aaggagactg atacatgcaa aattctatca 180
gggacacatg atgggatgac tactggtaca ccagttcacg tctttgtccc aaacacagat 240
caaaggggtg gtgattacag tgaaatgtct aaagcgt 277

<210> 211
<211> 196
<212> DNA
<213> Zea mays

<400> 211

cactcgatag aagacgtccg ggtcaaagta gaattacaac cccaagaaag gagactgata 60

catgcaaaat tctatcaggg acacatgatg ggatgactac tggtagacca attcacgtct 120
 ttgtcccaaa cacagatcaa aggggtggtg attacagtga aatgtctaag gcgtacagac 180
 catcccatgc agatgc 196

<210> 212
 <211> 309
 <212> DNA
 <213> Zea mays

<400> 212

ggcaacaaaa ctttctccga tggccgcgcc cgtgtcgcag ccgccggtgt ccgccagggc 60
 gtccacacgg ttttcccccc gcgggatagg cgcgctcccg gagtccgctc ccacgtccct 120
 ccggttatcc gtcggccgcc gtcgccgggc cgccagccta gaggtgaagg catcgggaaa 180
 tgtgttcggg aactacttcc aggttgcaac ctatggcgaa tcccatggag ggggtgttgg 240
 ttgcgttatc agtggctgcc caccagaat tcctctcact gaggcagaca tgcaagtaga 300
 actcgatag 309

<210> 213
 <211> 285
 <212> DNA
 <213> Zea mays

<400> 213

ctttctccga tggccgcgcc cgtgtcgcag ccgccggtgt acgacagggc gtccacacag 60
 ttttcccccc gcgggatagg cgcgctcccg gagtccgctc ccacgtccct ccggttatcc 120
 gtcggacgcc gtcgccgggc cgccagcata gatgtgaagg catcgggaaa tgtgttcggg 180
 aactacttcc aggttgcaac ctatggcgaa tcccatggag ggggtgttgg ttgcgttatc 240
 agtggctgcc caccagaat tcctctcact gaggcagaca tgcaa 285

<210> 214
 <211> 317
 <212> DNA
 <213> Zea mays

<400> 214

ctcagaccct caccaaccag gcaacaaac ctttccgat ggccgcgccc gtgtcgcagc 60

cgccggtgtc cgccagggcg tccacacggt ttctcccccg cgggataggc gcgctcccgg 120
 agtccgctcc cacgtccctc cggttatccg tcggccgccg tcgccgggcc gccagcctag 180
 aggtgaaggc atcgggaaat gtgttcggga actacttcca ggttgcaacc tatggcgaat 240
 ctcatggagg ggggtgttgg tgcgttatca gtggctgcc acccagaatt cctctcactg 300
 aggcagacat gcaagta 317

<210> 215
 <211> 286
 <212> DNA
 <213> Zea mays

<400> 215

ggacctgggc tcagaccctc accaaccagg caaccaaacc ttctccgatg gccgcgcccg 60
 tgtcgcagcc gccggtgtcc gccaggactt ccacacggtt tctccccgc gggataggcg 120
 cgctcccga gtccgcccc acgtccctcc gggttatccg cgcccgccgt cgccgcgct 180
 ccagcctaga ggtgaaggca tcaggaaatg tggttcggga ctacttccag gttgcaacct 240
 atggcgaatc ccatggaggg ggtgttgggt gcgttatcag tggctg 286

<210> 216
 <211> 274
 <212> DNA
 <213> Zea mays

<400> 216

ctcagaccct caccaaccag gcaaccaaacc cttctccgat ggccgcgccc gtgtcgcagc 60
 cgccggtgtc cgccagggcg tccacacggt ttctcccccg cgggataggc gcgctcccgg 120
 agtccgcccc cacgtccctc cggttatccg tcggccgccg tcgccgcgcc tccagcctag 180
 aggtgaaggc atcaggaaat gtgttcggga actacttcca ggttgcaacc tatggcgaat 240
 cccatggagg ggggtgttgg tgcgttatca gtgg 274

<210> 217
 <211> 255
 <212> DNA
 <213> Zea mays

<400> 217

ggcaacaaaa ccttctccga tggccgcgcc cgtgtcgcag ccgccggtgt ccgccagggc 60
 gtccacacgg tttctcccc gcgggatagg cgcgctccc gagtccgctc ccacgtccct 120
 ccggttatcc gtcggccgcc gtcgccgggc cgccagccta gaggtgaagg catcgggaaa 180
 tgtgttcggg aactacttcc aggttgcaac ctatggcgaa tcccatggag ttggtgttgg 240
 ttgcggtatc agtgg 255

<210> 218
 <211> 299
 <212> DNA
 <213> Zea mays

<400> 218

ctgtttttga caaacttgaa gctgaactgg caaaagccat gctttctctt cctgcaagca 60
 aggggtttga gattggcagt gggttcgctg gtacggactt tactggaagt gagcataatg 120
 atgagttcta tatggatgag gctggaaatg tgaggacacg aactaatcgc tcaggcgggtg 180
 ttcaggggagg gatatcaa at ggtgaaatta tttacttcaa agtggctttt aagccaacag 240
 caactatcgg aaagaagcaa aatactgtgt caaggagca tgaggatggt gaacttttg 299

<210> 219
 <211> 310
 <212> DNA
 <213> Zea mays

<400> 219

acataatgat gagttctata tggatgaggc tggaaatgtg aggacacgaa ctaatcgctc 60
 aggcggtggt caggagagga tatcaa atgg tgaaattatt tacttcaaag tggcttttaa 120
 gccaacagca actatcggaa agaagcaaaa tactgtgtca agggagcatg aggatgttga 180
 acttttggca agggggcgcc atgaccctg tgttgtccct cgagctgttc ctatggtggt 240
 atccatggct gctctggtec tgatggacca gctcatggcg catattgccc agtgtgagat 300
 gtttccgctg 310

<210> 220
 <211> 267
 <212> DNA
 <213> Zea mays

<400> 220

acggacttta ctggaagtga gcataatgat gagttctata tggatgaggc tggaaatgtg 60
aggacacgaa ctaatcgctc aggcggtgtt caggaggga tatcaaagg tgaaattatt 120
tacttcaaag tggcttttaa gccaacagca actatcgga agaagcaaaa tactgtgtca 180
agggagcatg aggatgttga acttttggca agggggcgcc atgaccctg tgttgccct 240
cgagctgttc ctatggtgga atccatg 267

<210> 221

<211> 241

<212> DNA

<213> Zea mays

<400> 221

gtttgagatt ggcagtgggt tcgctgttac ggactttact ggaagtgagc ataatgatga 60
gttctatatg gatgaggctg gaaatgtgag gacacgaact aatcgctcag gcggtgttca 120
gggagggata tcaaattggtg aaattattta cttcaaagt gcttttaagc caacagcaac 180
tatcgaaaag aagcaaaaata ctgtgtcaag ggagcatgag gtgttgaact tttggcaagg 240
g 241

<210> 222

<211> 231

<212> DNA

<213> Zea mays

<400> 222

ggctggaaat gtgaggacac gaactaatcg ctcaggcgggt gttcaggag ggatatcaaa 60
tggtgaaatt atttacttca aagtggcttt taagccaaca gcaactatcg gaaagaagca 120
aaatactgtg tcaagggagc atgaggatgt tgaacttttg gcaagggggc gccatgacct 180
ctgtgttgtc cctcgaggta atgtctccaa aaatttccta ccttttatca t 231

<210> 223

<211> 241

<212> DNA

<213> Zea mays

<400> 223

caacagcaac tatcggaag aagcaaaata ctgtgtcaag ggagcatgag gatgttgaac 60
 ttttggcaag ggggcgcat gaccctgtg ttgtccctcg agctgttct atggtggaat 120
 ccatggctgc gctggctctg atggaccact catggcgcat attgccagc gtgagatgtt 180
 tccgctgaac cttgccctac aagagcccat tggctctgct agcagtgcac ctgaactgtc 240
 a 241

<210> 224
 <211> 218
 <212> DNA
 <213> Zea mays
 <400> 224

cccctgtgtt gtccctcgag ctgttctat ggtggaatcc atggctgcac tggctctgat 60
 ggaccagctc atggcgcata ttgccagtg tgagatgttt ccgctgaacc ttgccctaca 120
 agagcccatt ggctctgcta gcagtgcac tgaactgtca ccaaacctat cataatgttt 180
 gtctgtgaac atgtccagc tttccttcga ccgaaatt 218

<210> 225
 <211> 282
 <212> DNA
 <213> Zea mays
 <400> 225

ctgtttttta ttctattact tctgtagctg ttctatggt ggaatccatg gctgctttgg 60
 tctgatgga ccagctcatg gcgcatattg ccagtgatga gatgtttccg ctgaaccttg 120
 ccctacaaga gccattggc tctgctagca gtgcatctga actgtcacca aacctatcat 180
 aatgactgtc gtggaacatg tcccagcttt ctttctatcg aaattctggt ctttgctaag 240
 cagtttgcaa ttcggaaccc ccataaaccc tcgactattg ta 282

<210> 226
 <211> 397
 <212> DNA
 <213> Zea mays
 <400> 226

acggacgcgt gggatcgaa tggtagatt gtgcacttca aagttgcttt taagccgaca 60

ccatctatcg ggggtgaaaca gaacactgtg tcaagggagc gtcagaacgt tgagctttctg 120
gcaagagggc gccatgaccc atgcgtcgcc cctcgagctg ttctgtggt ggaatccatg 180
gccgcgttgg tcctcgtgga ccagctgatg gcgcacgtgg ccagtgcca gatgttcgcg 240
ctcaatgctg cacttcaaga accagttggc tctttctagc agaggcagag cacacctgat 300
gagctcgcgc caaattttat catttatcat agtaataagt agtcaagcg tggcttggtt 360
tgcttgtctc ttgcaccgta gttttgtttt ttttccc 397

<210> 227
<211> 420
<212> DNA
<213> Zea mays

<400> 227

aggggtgact actggcacgc caattgttgg tattgtccca aacacagatc agataggcag 60
tgatcaccgt gaaatagcca atgtgtaccg accttctcat gcagacgcaa cttatgactt 120
caagtacggc gttagagctg tacagggagg tgggaggtcg tttggcacag aaaccgtagg 180
aagggtggct gcaggtgccc tcgccaagaa aattcttaag ctcaaattgtg gattagagat 240
ctcgtcgttt gtttaciaag tgcatacagt tgtgtccca gaagacggcg ttgattatgg 300
atctgtaact ttggaacata tagagagcaa catcgtaga tgtgtgatc cagagtacgc 360
agagatgatt atagacgcaa tcgacagagt tcgagttcca agggattcgg acggtggaat 420

<210> 228
<211> 406
<212> DNA
<213> Zea mays

<400> 228

aaaggggtgg tgattacagt gaaatgtcta aggcgtacag accattccat gcagatgcaa 60
cggatgactt caagtatgga gttagagctg tgcattgagg tgaagggtca tcagccagag 120
aaaccattgg cagggtggct gcaggagctc ttgcaaagaa aattctaaag ctcaaattcag 180
gagtggagat cttggcattt gtttctaaag tgcaccaagt cgtactttca gaagatgcag 240
ttgattatga gactgtaacc ttggaacata tagagagcaa catcgtaga tgtcctgatc 300
cataatatgc acagaagatg attgctgcca ttgatacggc acgagttata ggagattcaa 360

ttggtggggt cgtcacatgc attgcaagaa atgttctctg tgggtct

406

<210> 229
<211> 453
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<400> 229

cccacgcgtc cgagtgaat gtctaagggtg tacagaccat cccatgcaga tgcaacctgt 60
gacttcaagt atggagttag agctgtgcag ggaggtggaa ggtcatcagc cagagaaacc 120
attggcaggg tggctgcagg agctcttgca aagaaaattc taaagctcaa atcaggagtg 180
gagatcttgg catttgtttc taaagtgcac caagtogtac ttccagaaga tgcagttgat 240
tatgagactg taaccttggga acatatagag agcaacatcg ttagatgtcc tgatccagaa 300
tatgcagaga agatgattgc tgccattgat acggtacgag ttagaggaga ttcaattggg 360
ggggtcgtca catgcattgc angaaatgtt cctcgtgggc ttggctctcc tgtttttgac 420
aaacttgaag ctgaactggg caaagccatg ctt 453

<210> 230
<211> 385
<212> DNA
<213> Zea mays

<400> 230

agaccatccc atgcagatgc aacctatgac ttcaagtatg gagttagagc tgtgcagggg 60
ggtggaaggt catcagccag agaaaccatt ggcaggggtg ctgcaggagc tcttgcaaag 120
aaaattctaa agctcaaadc acgagtggag atcttggcat ttgtttctaa agtgcaccaa 180
gtcgtacttc cagaagatgc agttgattat gagactgtaa ccttgggaaca tatagagagc 240
aacatcctta gatgtcctga tccagaatat gcagagaaga tgattgctgc cattgatacc 300
gtacgagtta gaggagattc aattgggtggg gtcgtcacat gcattggaag aaatgttcct 360
cgtggtcgtg gatccctgt ttttg 385

<210> 231
<211> 400
<212> DNA

<213> Zea mays

<400> 231

aggatgttga acttttggca agggggcgcc atgaccctg tgttgtccct cgagctgttc 60
ctatggtgga atccatggct gcgctggtcc tgatggacca gctcatggcg catattgccc 120
agtgtgagat gtttccgctg aaccttgccc tacaagagcc cattggctct gctagcagtg 180
catctgaact gtcaccaaac ctatcataat gtttgtcgtg gaacatgttc cagctttcct 240
tctatcgaaa ttctggtctt tgctaagcag ttgcaattc ggaaccccca taaaccctcg 300
actattgtac ctagagataa agtgaacgga tatcatgata gaaatgcatt tatgtttttg 360
tgatgtggtg ttttactgtt attttaccoc tttttttttt 400

<210> 232

<211> 245

<212> DNA

<213> Glycine max

<223> unsure at all n locations

<400> 232

ttctcttcca atggcgtctt ctctttccac ccaacottcg actctagaag ctctctccgn 60
cttcgcttct ctcaattccg atctctcacc cctccacccc gcctacctcc gactctcact 120
ccgtctctgt cttcccaaga gacttcacat acaggcggct gggagtacct atggaaatca 180
ctttcgtgtt acaacatatg gggaatcaca tggaggaggt gttggttggt ttattgatgg 240
atgtc 245

<210> 233

<211> 254

<212> DNA

<213> Glycine max

<400> 233

atttgacaaa cttgaagctg aactagctaa agctgctatg tcattgcctg caaccaaggg 60
ctttcagttt ggtagtgggt atgcaggcac ctttttgact gggagtgaac acaatgatga 120
gttctatata gatgaacatg gaaacacaag aacaagaaca aatcgctctg gtgggatata 180
gggtggaatt tccaatgggg aaatcattaa tatgagaata gctttcaggc caacatcaac 240
aattggaaag aagc 254

<210> 234
 <211> 247
 <212> DNA
 <213> Glycine max

<400> 234

ccggttcaaa acgaggaaat tctagccaag aagtatagga ttcggttaag gggaattgat 60
 gcaccagaaa gtgcaatgcc atatggaaag gaagctaaaa ctgaactgac caagattggt 120
 caaggcaagc ctttgaggat ccttgtttat gaggaagatc gttatggtcg ttctgtaggt 180
 gatattctatt gtaatggcat tttgtacag gaaatgatgt taaagaaagg tttagcatgg 240
 cactacg 247

<210> 235
 <211> 255
 <212> DNA
 <213> Glycine max

<223> unsure at all n locations
 <400> 235

gtaccaata ctgatcaaag aggacatgac tatagcgaga tggcagtagc ttataggcct 60
 cccatgcaga tgctacctat gacatgaagt atgggtgtcag atcagttcag ggtgggtggt 120
 gatcttctgc aagagaaaca attggnaggg ttgcttctgg tgctgttgct aagaaaatcc 180
 ttaaagaatt ttctggaact gagattctgg cctatgtctc tcaagttcat aagattgttc 240
 ttccagagga cctga 255

<210> 236
 <211> 249
 <212> DNA
 <213> Glycine max

<400> 236

actcgagccg attcggctcg agggcttagt gaaattatta taggcacctt tttgactggg 60
 agtgcccaca atgatgagtt ctaaatagat gaacatggaa aactagaac aagaacaaat 120
 cgctctgtgg gatacaggtt tttgtgctgt tctgtaatta ctaattagtt gtttctagat 180
 atgcactata tcagtcacat gtctatattt gtcttactta tattatctgt attgacaatc 240

agggtggaa

249

<210> 237
<211> 201
<212> DNA
<213> Glycine max

<400> 237

gcactttatg actgggagtg aacacaaatga tgagttctat atagatgaac atggaaacac 60
aagaacaaga acaaatcgct ctcgtgggat acagggtgga atttccaatg gggaaatcat 120
taatatagaa tagctttcaa gccaacatca acaattggat taagtcttaa tctcttctct 180
ttctgtcttc atcactatct c 201

<210> 238
<211> 274
<212> DNA
<213> Glycine max

<400> 238

tctctcccaa tttctctcat caaagtttca acctttgata agattgaatc atggggaacg 60
ccctgagatt cctctacagc cattgctgca agccacagc agctggatgat tctgaatcac 120
ttggaccaca cgggtgtttcc tctgccaccg ttggtgtttc aacacttgcc catgatctct 180
ttcactttga catcacctcc cagggtcccg aaggactcag caagcatggt gtgtcttcta 240
agaaggctca ggctaattgg tatagaaagt tagt 274

<210> 239
<211> 270
<212> DNA
<213> Glycine max

<400> 239

catttctctc atcaaagttt caacctttga taagattgaa tcatggggaa cgccctgaga 60
ttcctctaca gccattgctg caagcccaca gcagctggtg attctgaatc acttggccca 120
cacggtgttt cctctgccac cgttggtgtt tcaacacttg cccatgatct ctttcacttt 180
gacatcacct ccaggtccc ggaaggactc agcaagcatg ttgtgtcttc taagaaggct 240
caggctaatt ggtatagaga gttagtagtg 270

<210> 240
 <211> 254
 <212> DNA
 <213> Glycine max

<400> 240

aatgttttta ggtcccgga ggactcagca agcatgttgt gtcttctaag aaggctcagg 60
 ctaattggta tagaaagtta gtagatgctt ggaaagaggc aaaacctcct cctaagacac 120
 ctgaagaagc agctagactt gtcattcaga ccttgagaag acatcaaaaa gcagatgttg 180
 agggattgtt ggctttctat ggtcttcctc taccacacac actgggttcaa ggaactaccc 240
 aacccttttc atcc 254

<210> 241
 <211> 276
 <212> DNA
 <213> Glycine max

<223> unsure at all n locations
 <400> 241

atcacctccc aggtcccgga aggactcagc aagcatgttg tgtcttctaa gaaggctcag 60
 gctaattggc atagaaagtt agtagatgct tggaaagagg caaacctcc tcctaagaca 120
 cctgaagaag cagctagact tgtcattcag accttgagaa gacatgcaaa aagcagatgt 180
 tgagggttg ttggctttct atgggtctct ctaccacaca cactgggttca aggaataccc 240
 aacccttttc atccttgcct gatggagttc anttga 276

<210> 242
 <211> 337
 <212> DNA
 <213> Glycine max

<400> 242

tcggaatcgg tcgtagaatt tctggaactg agattctggc ctatgtctct caagttcata 60
 agattgttct tccagaggac cttattgatc atgacactct gactcttgat cagattgaga 120
 gtaacattgt tcgatgtcca gaccggagt atgcagagaa gatgatctct gcaattgatg 180
 ctgtgcgagt gagaggatg tctgttggtg gtgttgtgac atgcattgtg aggaactgtc 240
 cacgaggctc cggttcacca gtatttgaca aacttgaagc tgagctggct aaagctgcaa 300

tgtcattgcc tgcaaccaag ggctttcagt ttggtag

337

<210> 243
<211> 256
<212> DNA
<213> Glycine max

<400> 243

tgatcatgac actctgactc ttgatcagat tgagagtaac attgttcgat gtccagaccc 60

ggagtatgca gagaagatga tatctgcaat tgatgctgtg cgagtgagag gtgattctgt 120

tggtggtggt gtgacatgca ttgtgaggaa ctgtccacga ggtctcggtt caccagtatt 180

tgacaaactt gaagctgagc tggctaaagc tgcaatgtca ttgcctgcaa ccaagggctt 240

tcagtttggt agtggg 256

<210> 244
<211> 357
<212> DNA
<213> Glycine max

<223> unsure at all n locations

<400> 244

gagacttcag atacgggctg ctgggagnnt ctatggaaat cactttcgtg tttcaacata 60

tggnccgaatc acatggagga ggtgttggtt gtattattga tggatgtcct cctcaccttc 120

ctctctccga agctgatatg caattggatc ttgacagaag gaggccaggt cagagccgaa 180

ttacaactcc tagaaaggag actgatacat gtaaaatatt ttcaggagtt tctgaaggac 240

ttactactgg aactccaatt catgtatttg taccatact gatcaaagag gacatgacta 300

tactgagatg gcagtagctt ataggccttc ccatgcagat ntactatgac atgagta 357

<210> 245
<211> 252
<212> DNA
<213> Glycine max

<400> 245

ctgaagctga tatgcaagtg gatcttgaca gaaggaggcc aggtcagagc cgaattacaa 60

ctcctagaaa ggagactgat acatgtaaaa tattttcagg agtttccgac agaataccta 120

ctggaactca attcatgtat ctgtacccaa tactgatcaa agaggacatg actatagcga 180
 gatggcagta gcttataggc cctcccatgc agatgctacc tatgacatga agtatgggtg 240
 cagatcagtt ca 252

<210> 246
 <211> 265
 <212> DNA
 <213> Glycine max
 <400> 246

ggaaatcact ttcgtgttac aacatatggg gaatcacatg gaggaggtgt tggttgtgtt 60
 attgatggat gtcctcctcg ccttcctctc tctgaagctg atatgcaagt ggatcttgac 120
 agaaggaggc caggtcagag ccgaattaca actcctagaa aggagactga tacatgtaaa 180
 atattttcag gagtttccga agaatcacta ctggaactcc aattcatgta tctgtaccca 240
 atactgatca aagaggacat gacta 265

<210> 247
 <211> 181
 <212> DNA
 <213> Glycine max
 <223> unsure at all n locations
 <400> 247

agagacttca gatacgggct gctgggagta tctatggaaa tcactttcgt gtttcaacat 60
 atggagaatc acatggagga ggtgttggtt gtattattga tgnatgtcct cctcaccttc 120
 ctctctccga agctgatatg caattggatc ttgacagaag gaggccaggt caganccgaa 180
 t 181

<210> 248
 <211> 274
 <212> DNA
 <213> Glycine max
 <223> unsure at all n locations
 <400> 248

ctctttccac caaaccattc acaccgncg ctctctccgg ctctgcttct ctcaattccg 60
 atctcggaac cctctccccc gcctacctcc gactctcact ccgtcctcgt cttcccaaga 120

gacttcacat acaggcggct gggagtagct atggaaatca ctttcgtgtt acaacatatg 180
 gggaaatcaca tggaggaggt gttggttgtg ttattgatgg atgtcctcct cgccttcctc 240
 tctctgaagc tgatatgcaa gtggatcttg acag 274

<210> 249
 <211> 248
 <212> DNA
 <213> Glycine max

<400> 249

gacgctctct ccgccttcgc ttctctcaat cccgatctcc gatccttctc ccccggtac 60
 ctccgtctct cactccgtcc tcgtcttccc aagatacttc agatacgggc ttctgggagt 120
 atctatggaa atcactttcg tgtttcaaca tatggagaat cgcattggagg aggtgttggt 180
 tgtattattg atggatgtcc tctcactctt cctctctcgg aagctgatat gcaattggat 240
 cttgacag 248

<210> 250
 <211> 302
 <212> DNA
 <213> Glycine max

<223> unsure at all n locations
 <400> 250

tctaattctc ccatttctct tccaatggcg ttttctcttt ccaccaaac attctacanc 60
 cgacgtctc tcgccttcg cttctctcaa ttccgatctc ggatccctct ccccgcccta 120
 cctccgactc tcaactccgc ctgccttccc caagaacttc gcatacaggc ggctgggagt 180
 acctatggaa atcactttcg tgttacaaca tatggggaat cacatggagg aggtgttggt 240
 tgtgttattg atggagtctc ctgccttctt tctctctgaa gctgatatgc aagtgganct 300
 tc 302

<210> 251
 <211> 246
 <212> DNA
 <213> Glycine max

<400> 251

ctccacaaa ccattctcat caaccgacgc tctctccgcc ttgccttctc tcaatcccga 60

tctccgatcc ttctcccccg gctacctccg tctctcaactc cgtcctcgtc ttcccaagag 120
 acttcagata cgggctgctg ggagtatcta tggaaatcac tttcgtgttt caacatatgg 180
 agaatcgc at ggaggaggtg ttggttgat tattgatgga tgcctcctc accttcctc 240
 tccgaa 246

<210> 252
 <211> 275
 <212> DNA
 <213> Glycine max

<400> 252

gttctcaat caatctaatt ctcccatttc tcttccaatg gcgtcttctc tttccaccaa 60
 accattctca tccgacgctc tctccgcctt cgttctctc aattccgatc tcggatccct 120
 ctccccgcc tacctccgac tctcaactcg tctcgtctt cccaagagac ttcacataca 180
 ggcggctggg agtacctatg gaaatcaact tctgtgttaca acatatgggg aatcacatgg 240
 aggaggtggtt ggttggtgta ttgatggatg tctc 275

<210> 253
 <211> 262
 <212> DNA
 <213> Glycine max

<400> 253

gcgttcttct ctctccacca aaccattctc atcaaccgac gctctctcgt ccttcgcttc 60
 tctccttccc gatctccgat ccttctcccc cggtacctc cgtctctcac tccgtcctcg 120
 tcttcccaag agacttcaga tacgggctgc tgggagtatc tatggaaatc actttcgtgt 180
 ttcaacatat ggagaatcca tggaggaggt gttggttgta ttattgatgg atgtcctcct 240
 caccttcctc tctccggagc tg 262

<210> 254
 <211> 263
 <212> DNA
 <213> Glycine max

<223> unsure at all n locations
 <400> 254

agatactgtg agtgtttttn ttcctcaatc aatctaattc tctcaatggc ttcttctctc 60
 tccaccaaac cattctcatc aaccgacgct ctctccgct tgccttctct caatcccgat 120
 ctccgatact tctcccccg ctacctccgt ctctcactcc gtcctcgtct tccaagaga 180
 cttcagatac gggctgctgg gagtatctat ggaaatcact ttcgtgtttc aacatatgga 240
 gaatcgcacg gaggaggtgt tgg 263

<210> 255
 <211> 374
 <212> DNA
 <213> Glycine max

<400> 255

tctctttcca ccaaaccatt ctccagccgac gctctctccg ccttcgcttc tctcaattcc 60
 gatctcggat ccctctcccc cgccctacctc cgactctcac tccgtcctcg tcttcccaag 120
 agacttcgca tacaggcggc tgggagtacc tatggaaatc actttcgtgt tacaacatat 180
 ggggaatcac atggaggagg tgttggttgt gttattgatg gatgtcctcc tcgccttcct 240
 ctctctgaag ctgatatgca agtggatctt gacagaagga ggccaggcca gagccgaatt 300
 acaactccta gaaaggagac tgatacatgt aaaatatatt caggagtctc cgaaggaatc 360
 actactggaa ctcc 374

<210> 256
 <211> 222
 <212> DNA
 <213> Zea mays

<400> 256

cttttgaga gagcacagtt ttgttacaat gctgatacat atgatagcaa tgctttccac 60
 atggatggtt ttggcggctc tttggttgaa tatatggtta gagaaactga aaagctccat 120
 gcacatgttg ggagatacaa gagccagatg agcacctttc tttccgagga tctgcctgag 180
 cccggttgca gctatgatac caagggttgc accatgcgat ct 222

<210> 257
 <211> 267
 <212> DNA
 <213> Zea mays

<400> 257

gtaccogctc aaccggccgg cctacgaccc cctccactcc gccgcccggc gccgcctcaa 60
cgccctctttc gtcgagctct tcatccgcga gtccgaggcc gttcagtcca aggccggaag 120
gtaccaaagc ctacaggaga ttccattctt cgcttacaga gttcctttctg ctctggcgcc 180
tccatacaac ttcacaagcg atctgtatcc cgctgccgcg tcagtcaacg ttaacgacgc 240
catatggagc atgtacttcg acgagct 267

<210> 258

<211> 346

<212> DNA

<213> Zea mays

<400> 258

ccggcatttt ccttgacaaa cgtgctctcc ctcccatttc ctgcgagggtg gttggtagcg 60
atggccttca agctgatcac caagcccgcg gccgctgcgc ccgctgctgc ttactgggga 120
gatctcgccc aacaactccg caacgcccat agctaaggta gagaggggtg atcgaagtga 180
catattgaca ttggatagca tcagacaagt tttgattaga ctagaagaca gcatcatatt 240
tggccttttg gagagagcac agttttgtta caatgctgat acatatgata gcaatgcctt 300
tcacatggat ggttttggag gatctttggt ctgatatata gttaga 346

<210> 259

<211> 258

<212> DNA

<213> Zea mays

<400> 259

gttgggagat acaagagccc agatgagcac cctttctttt ccaaggatct gcctgagccc 60
cggttgccac ctatgcaata cccaagggtt ttgcatccca ttgctgattc tatcaatata 120
aacaagaga tttggaaaat gtattttgat gaacttcttc caagattggt gaaagaagga 180
agtgatggta atgctggatc cagtgccttt tgtgacacaa cctgcttgca ggcactctcc 240
agaaggatcc actatggg 258

<210> 260

<211> 254

<212> DNA

<213> Zea mays

<400> 260

ctatgggaag tttgtggcag aggctaagtt tcaggagtcc ccggaagctt acatgccagc 60
cataatagct caggaccgtg atcaactcat gcaccttctc acatatgaaa cgggtggagcg 120
tgctatcgaa cataggggtgg aagccaaagc caagatcttc gggcaagagg tgaacatcgg 180
tgtggaggac aacggcagcc caccggtgta caagatcggt ccgagcttgg tcgccgagct 240
gtacagctac agaa 254

<210> 261

<211> 216

<212> DNA

<213> Zea mays

<400> 261

accgtgatca actcatgcgc cttctcacat atgaaacggt ggagcgtgct gtcgaacaca 60
gggtggaagc caaagccaag atcttcgggc aagaggtgaa cattggtgct aaggacaacg 120
gcagccaacc agtctacaaa atcaggccga gcttggtcgc cgagctgtac agctacagaa 180
tcatgccgct aaccaaggag gttgaggtcg cgtact 216

<210> 262

<211> 308

<212> DNA

<213> Zea mays

<400> 262

cccattcggt ctagccctcc ctccgacact ccgatccatt actcgctatg gacgcggcgg 60
gcggcgacca gctaagcctg gccgcggtgc gcgacgcgct ggtgcggctg gaggactccg 120
tggtgttcgc gtcctcagag cgccccggc atccgcggaa ccgccagcct acgcgcccgc 180
cgccaccgct ggagaacatt cgctcgtgga gttcttcgtc cgggaagcag aggccctcaa 240
cgcaaaggct ggacattatc aaaagccaga agatgttcca ttcttccttc aagatctacc 300
ctcacctc 308

<210> 263

<211> 178

<212> DNA

<213> Zea mays

<400> 263

ctcaatacaa atgtgagttc ttgtaggctg gacattatca aaagccagaa gatgttccat 60
tcttccctca agatctaccc tcacctctct ttcctacaaa gccttccgca aagggtcttg 120
acccttttgc ttcattggtc accgtgaatg atgcaatatg gaaaatgtat tttgatga 178

<210> 264

<211> 232

<212> DNA

<213> Zea mays

<400> 264

cttttattag ggaagagagg gttgatcgaa gtgaaatatt gacattggat agcattagac 60
aagttttgat tagactagaa gacagcatca tatttggcct tttggagaga gcacagtttt 120
gttacagtgc tgatacatat gatagcaatg ctttccacat ggatggtttt ggcggtttt 180
tggttgaata tatggttaga gaaactgaaa agctccatgc acagggttggg ag 232

<210> 265

<211> 304

<212> DNA

<213> Zea mays

<400> 265

agctggccac caaggccgcg gcggcgctgc ccgctgctgc tcaccgcggg ggtctcgccc 60
gggggcccga gggtagatc cgcgttgctt tcggaccagc gcctagaaac aaggggctcc 120
gcgcggccaa caactccgcg acgcccgtgg ctacggaaga gagggttgat cgaagtgaaa 180
tattgacatt ggatagcatt agacaagttt tgattagact agaagacagc atcatatttg 240
gccttttggg gagagcacag ttttgttaca atgctgatac atatgatagc aatgctttcc 300
acat 304

<210> 266

<211> 260

<212> DNA

<213> Zea mays

<400> 266

tggccttcaa gctggccacc aaggccgcgg cggcgtcgcc cgctgctgct caccgcgggg 60
 gtctcgcccg ggggcccggag ggtacgagcc gcgttgccct cggaccagcg cctagaaaca 120
 aggggctccg cgcggccaac aactccgcga cgcctgtggc taaggaagag agggttgatc 180
 gaagtgaat attgacattg gatagcatta gacaagtttt gattagacta gaagacagca 240
 tcatatttgg ccttttggag 260

<210> 267
 <211> 281
 <212> DNA
 <213> Zea mays

<400> 267

gtcgactaat aaaagaaaag gacaccgatt ctctgatgga tatgctgaca ttcaaggctg 60
 tggaagagaa ggtcaagaag agagtagaga agaaggccag gacgttcggg cagaacgtca 120
 ccttgaggga caatgccact gctggtgaca gcgagtgcaa ggtcgatccc aaagtgtctt 180
 ccaagctgta tgatcagtgg gtgatgccac tgaccaagga tgtcgaagtc gagtatctcc 240
 tgcgcgcct cgattgatca cccgattagt tgtagctgcg a 281

<210> 268
 <211> 227
 <212> DNA
 <213> Zea mays

<400> 268

caagaagaga gtagagaaga aggccaggac gttcgggcag aacgtcacct tggaggacaa 60
 tgccactgct ggtgacagcg agtgcaaggt cgatcccaaa gtgctctcca agctgtatga 120
 tcagtgggtg atgccactga ccaaggatgt cgaagtcgag tatctcctgc gccgcctcga 180
 ttgatcaccg gattagttgt agctgcgaac tttatgtacg cgtgggtt 227

<210> 269
 <211> 451
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <400> 269

aggggnnnna aatttagctg atatcattgc atgtctgtcc ggttccaatt cgaccacgc 60

gtacgaagag cccagatgag caccctttct ttcttgagga tctgcctgag ccccggttgc 120
cagctatgca gtacccaagg gttttgcatc ccattgccga ttctatcaat atcaacaaag 180
agatttgga aatgtatfff gatgaacttc ttccaagatt ggtgaaaaaa ggaagtgatg 240
gtaatgctgg atccagtgct ctttgtgaca cgacctgctt gcaggcgctc tccaaaagga 300
tccactatgg gaagtttgtg gcagaagcta agtttcagga gtccccggaa gcttacatgc 360
catccataat agctcaagac cgtgatcaac tcatgcacct tctcacatat gaaacggtgg 420
aacgtgctat cgaacacagg gtggaaacca a 451

<210> 270
<211> 453
<212> DNA
<213> Zea mays

<400> 270

atgctttcca catggatggg tttggcggct ctttgggtga atatatgggt agagaaactg 60
aaaagctcca tgcacagggt gggagataca agagcccaga tgagcaccct ttctttctctg 120
aggatctgcc tgagccccgg ttgccaccta tgcagtaccc aagggttttg catcccattg 180
ccgattctat caatatcaac aaagagattt ggaaaatgta ttttgatgaa cttcttccaa 240
gattggtaaa aaaaggaagt gatggtaatg ctggatccag tgctctttgt gacacgacct 300
gcttgcaagc gctctccaaa aggatccact atgggaagtt tgtggcagag gctaagtttc 360
aggagtcccc ggaagcttac atgccagcca taatagctca agaccgtgat caactcatgc 420
accttctcac atatgaaacg gtggagcgtg cta 453

<210> 271
<211> 403
<212> DNA
<213> Zea mays

<400> 271

aagagcccag atgagcacc tttcttttcc aaggatctgc ctgagccccg gttgccaggt 60
atgcgggtacc caaaggtttt gcatccatt gctgattcta tcaatatcaa caaagagatt 120
tgaaaaatgt attttgatga acttctacca agattggtga aagaaggaag tgatggtaat 180
gctggatcca gtgctctttg tgacacaacc tgcttgacag cactctccag aaggatccac 240

tatgggaagt atgtggcaga cgcttagttt caagagtccc ctgaagctta cacgccagcc 300
 ataatagccc aagtctgctt ttgttccaac tattagtatt tctagtacta ctattttcat 360
 ttatttttta atctaattcc aaagtttcag aaccaaattg ttt 403

<210> 272
 <211> 426
 <212> DNA
 <213> Zea mays

<400> 272

cgacgcgtg ggcggacgcg tgggcacata tgaaacggtg gagcgtgcta tcgaacacag 60
 ggtggaggcc aaagccaaga tcttcgggca agagggtgaac attggtgcta aggacaacgg 120
 cagcccaccg gtctacaaaa tcaggccgag cttgggtcgcc gagctgtaca gctacagaat 180
 catgccgcta accaaggagg ttgaggtcgc gtacttgctt aagaggctgg attgagtgtg 240
 ttacgtagc tgtaaaactg ccagatccga actcctggta ttaaaccata acatcggtaa 300
 gtaccattt ctgtgaagag gatgatccga actcctgtca ttaaaccaga acatcagtaa 360
 gtaccagtt ttggggaaag gatggaaaat ataccatgtg tggcaagcaa catgcataat 420
 atcatc 426

<210> 273
 <211> 363
 <212> DNA
 <213> Zea mays

<400> 273

cgcagttcac gcttggctga cgaccgaccc ccattcggtc tagccctccc tccgacactc 60
 cgatccatta ctgcctatgg acgcggcggg cggcgaccag ctaagcctgg ccgcggtgcg 120
 cgacgcgctg gtgcggctgg aggactccgt ggtgttcgcg ctcatcgagc gcgcccggca 180
 tccgcggaac gcgccagcct acgcgcccgc cgccaccgct ggagaacatt cgctcgtgga 240
 gttcttcgtc cggaagcag aggcctcaa cgcaaaggct ggacattatc aaaagccaga 300
 agatgttcca ttcttccctc aagatctacc ctacctctc ttctctacaa agccttcccc 360
 aaa 363

<210> 274
 <211> 426
 <212> DNA
 <213> Zea mays

<400> 274

cggacgcgtg ggcggacgcg tgggtggcct tcaagctggc caccaaggcc gcggcggcgt 60
 cgcccgtgc tgctcaccgc gggggtctcg cccgggggcc ggagggtacg agccgcgttg 120
 ccttcggacc agcgcctaga aacaaggggc tccgcgcggc caacaactcc gcgacgcccg 180
 tggctaagga agagaggggt gatcgaagtg aaatattgac attggatagc attagacaag 240
 ttttgattag actagaagac agcatcatat tgggcctttt ggagagagca cagttttgtt 300
 acaacgctga tacatatgat agcaatgctt tccacatgga tggttttggc ggctctttgg 360
 ttgaatatat ggttagagaa actgaaaagc tccatgcaca ggttgggaga tacaagagcc 420
 cagatg 426

<210> 275
 <211> 435
 <212> DNA
 <213> Zea mays

<400> 275

ccttcaagct ggtcaccaag cccgcggcgg cgtcgcccgc tgctgctcac tggggagagc 60
 tcgcccgggg gccgcagggt accagccgcg ttggctcttg acacaagccc acaaacacag 120
 ggcgctccgc acggacaaaa tctccgaaac gcccatggct aaggaagaga gggttgatcg 180
 aagtgaata ttgacatggg atagcatcag acaagttttg attagactag aagacagcat 240
 catatttgga cttttggaga gagcacagtt ttgttacaac gctgacacat atgatagcaa 300
 tgctttccac atggatgggt ttggaggggc tttggttgaa tatatggtta gagaaactga 360
 aaagctccat gcacagggtg ggagggtacaa gagcccagat gagcaccctt tcttttccaa 420
 ggatctgcct gagcc 435

<210> 276
 <211> 379
 <212> DNA
 <213> Zea mays

<400> 276

cctcccactt cgtgcgagcg tcccgaacta agttgctcgt ggtggagggtg gtttgtggcg 60
atggccttca agctggtcac caagcccgcg gcggcgctgc ccgctgctgc tcaactgggga 120
gatctcgccc ggtggccgca gggtagcagc cgcgttgctt tcggaccagc gcccaggaac 180
aaggggctcc gcacgggcaa caactccgca acgcccattg ctaaggaaga gaggggtgat 240
cgaagtgaat tattgacatt ggatagcatc agacaagttt tgattagact agaagacagc 300
atcatatttg gacttttggg gagagcacag ttttgttaca acgctgacac atatgatagc 360
aatgctatcc acatggatg 379

<210> 277
<211> 405
<212> DNA
<213> Zea mays

<400> 277

aaagaattca tattggtaaa tatgttgctg aggtgaagtt caaagacgct cctcaagagt 60
atagtcgact aataaaagaa aaggacagca attctctgat ggatatgctg acattcaagg 120
ctgtggaaga gaaggtaag aagagagtag agaagaaggc taggacgttc gggcagaacg 180
tcaccttggg tgacaatgcc actgctgggtg acagcgagtg caaggctgat cccaaagtgc 240
tctccaagct gtatgatcag tgggtgatgc cactgaccaa ggatgtcgaa gtcgagtatc 300
tcctgcgccc cctcgactga tcagtgatca cccgattagc tgtagctgct aactttatgt 360
acgctggggt atcagattgc tttgcacatg ctctttatgg cttta 405

<210> 278
<211> 322
<212> DNA
<213> Glycine max

<400> 278

agctgaggca aaatatcaag ctagtccaga ttcataataa gatgccatta tagcacagga 60
caaggacaag ttgatggaat tgctaacata tcctgaagtt gaagaggcaa ttaagaggag 120
agttgacatg aagaccaaga cttatgggca agaactgggt gtaactacga aggaacatcg 180
aactgaacct gtctacaaaa taaatccaag cttgggtgct gatctataca gtgattggat 240
catgccattg acaaaggaag ttcaagttgc ctatctgttg agaaggttgg attgaacata 300

acaaaaagta ccttttcaat ta

322

<210> 279
<211> 262
<212> DNA
<213> Glycine max

<400> 279

cccacaaata gtcaaacaag gggatgatgg taactctgga tccagtgctg tttgtgatgt 60
aatatgcttg caggctctct caaagagaat tcattatgga aaatatgtag ctgaggcaaa 120
ataccaagct agtccagatt catataaaga tgccattata gcacaggaca aggacaagtt 180
gatggaattg ctaacatatc ctgaagttga agaggcaatt aagaggagag ttgacatgaa 240
gaccaagact tatgggcaag aa 262

<210> 280
<211> 263
<212> DNA
<213> Glycine max

<400> 280

aagacgacag aaggggaaaa agtatggagt ttatacttca gagttcttat tccacaaata 60
gtccaagcaa ggagatgatg gtaactctgg atccagtgct gtttgtgatg taatatgctt 120
gcaggctctc tcaaagagaa ttcattatgg caaatatgta gctgaggcaa attatcaagc 180
tagtccagat tcatataaag atgccattat agcacaggac aaggacattg ttatggaatt 240
gctaacatat cgtgaagttg aag 263

<210> 281
<211> 299
<212> DNA
<213> Glycine max

<400> 281

tgttggttct ctttcaatgg agtctaagct ttttaagagcc accaccatct cagtcccttc 60
aacaccotca tgcgctttcc atcgcacaaac tcgcaaggct tcgatttcct tcaaccccac 120
ctcggatttc gccccaaaaa gcaatctttc tctccaggca catgcggctt ccatcgagtc 180
agtgccaaca aagaaaagaa ttgatgagag tgacaacctg acccttgatc atataagacg 240

ttcttttagtt cgtcaagagg atagcataat cttcagtctc atcggcgagc acaatactg 299

<210> 282
<211> 388
<212> DNA
<213> Glycine max

<400> 282

gccatttttag cccaggacaa ggataggttg atggatatgc taacatatcc gaaagttgaa 60

gaggaaaaca tgataagagt agaggaaaag gccaaaaaat ttggcctagt agtggattta 120

aatgcaaaga agcctcgagc tgagccactg tacataataa atccaagtgt ggtttctgat 180

ctgtatggcc attgggtcat gccattgaca aaggaagtgc aagttgcata tttattgagg 240

aggctggact aaacatatag taagagttct tggttatggt ggtggtagag aaccaataat 300

tcatgtatat aaataaagct tagactgagt aataatgtct ttgaatggac ttgaatttga 360

tagaaattaa caaacaccgt tttctttc 388

<210> 283
<211> 319
<212> DNA
<213> Glycine max

<400> 283

acgcgtcagt acggctgcga gaagacgaca gaagggggta gaatttggtg ttaagaatac 60

agaggccatt caagctaagg ctggaagata caaaaaccct gaagaaaacg ctttcttccc 120

agaaaattta ccaccatcaa ttgtgccatc ttactccttc aaacagtttt tgcatactgg 180

agctgcttca attaacatta acaagtocat ctggaaaatg tatttccaag agttacttcc 240

attggttgct acttcggggg atgatggaaa ctatgcacaa actgcagcta atgatctttc 300

attagtgcag gccatctct 319

<210> 284
<211> 424
<212> DNA
<213> Glycine max

<400> 284

cccacgcgtc cgtacggctg cgagaagacg acagaagggg ggcaagaact ggttgtaact 60

acgaaggaac atcgaactga acctgtctac aaaataaatc caagcttggt tgctgatcta 120
 tacagtgatt ggatcatgcc attgacaaag gaagttcaag ttgcctatct gttgagaagg 180
 ttggattgaa cataacaaaa agtacctttt caattacagt gtttataggg ttatttatct 240
 tttctaggaa atgatacttg caatgggtaa tttctcttga atcatgattc atgactataa 300
 acttgagctt ttgtaactaa catatgagga agctgatatt gggttcttat ataataatta 360
 atggcatctt ttatgttggt ccaaaaaaaaa gacatggact aatccaaaaa aaagcggccg 420
 ctct 424

<210> 285
 <211> 297
 <212> DNA
 <213> Zea mays

<400> 285
 tgccctcaca agccagaagg ttccatgttt gtcattggtga aactaaattt gtatcttttg 60
 gagagcatcc atgatgatat tgatttttgt tgcaagctgg caaaagaaga gtccgtgatt 120
 ttgtgtocag ggagtgtttt gggaaatggaa aactggatcc gtatcacttt cgccattgat 180
 tcatcttctc ttcttgatgg tcttgagagg ctgaaatctt tctgccaaag gcataagaag 240
 aagaatttgc ttaatggcca ttaactatat acgacttcag agttgttacc cacttcc 297

<210> 286
 <211> 291
 <212> DNA
 <213> Zea mays

<400> 286
 cacatgccct cacaagccag aaggttccat gtttgtcatg gtgaaactaa atttgtatct 60
 tttggagagc atccatgatg atattgattt ttgttgcaag ctggcaaaaag aagagtccgt 120
 gatttttgtg ccagggagtg ttttgggaat ggaaaactgg atccgtatca ctttcgccat 180
 tgattcatct tctcttcttg atggtcttga gaggtgaaa tctttctgcc aaaggcataa 240
 gaagaagaat ttgcttaatg gccattaact atattcgact tcaaagttgt t 291

<210> 287
 <211> 265

<212> DNA
<213> Zea mays

<400> 287

ctcttgccga caagaatact gttgccatgg tcattgtgaa cccaggaaac ccatgtggca 60
atgtgtactc ctatgagcac ctggccaagg tcgctgagac cgcgcgaaaag cttggcatat 120
tcgtcatagc agatgaggtt tacgcacact tgacatttgg agagaggaaa tttgtgccga 180
tgggtgtgtt tggggctgtg gctccagtgt taacactggg gtccatatca aagagatgga 240
tgggtgcctgg atggcggctt ggatg 265

<210> 288
<211> 296
<212> DNA
<213> Zea mays

<400> 288

aaacccaac aatccttgcg gcagtgtcta caccogtgaa catttagcca aggttgcaga 60
ggtagcaagg aagcttgga tactaatcat cgctgatgaa gtgtatggaa acctgggtgtt 120
tggggacacc ccttacgtcc caatgggtgt ctttggccac attgcccctg tgttgagcat 180
aggatcacta tcgacgagat ggatagtgcc tgggtggcga cttgggtggg tagctgtatg 240
tgatcccaac aagattctgc aagacaccaa gatcattgca tcaataacaa acttcc 296

<210> 289
<211> 232
<212> DNA
<213> Zea mays

<400> 289

cggtctgagc cttgcggcag tgtctacacc cgtgaacatt tagccaaggt cgcggaggta 60
gcaaggcagc ttggaatact agtcatcgct gatgaagtgt atggaaacct ggtgtttggg 120
gacacccctt acgtcccaat ggggtgtctt ggccatattg cccctgtgtt gagcttagga 180
tcactatcga agagatggat agtgccctggg tggcgacttg gttgggtagc tg 232

<210> 290
<211> 253
<212> DNA
<213> Zea mays

<400> 290

cgacgacatc ttctgtaccg ccggaggacg acaagccatc gaggtggtgg tctcagtcct 60
cgcgagccg ggcaccaaca tactgtctcc gaggccgggc tatccgaact acgaggcgcg 120
cgcagggctg cacaacctgg aagtccgccc gttcaatctg atccccgaga gaggggtggga 180
gattgacatc gacggtctgg agtcgatcgc cgacaagaac accaccgcca tggatcatcat 240
aaaccccaac aac 253

<210> 291

<211> 235

<212> DNA

<213> Zea mays

<400> 291

cccacgcgtc cgctctggcg gacacctgtc gagcgacctt ccatacaagc tgtcgagcga 60
cgacatcttc gtcaccgccg gaggacgcaa gccatcgagg tgggtggtctc agtcctcgcg 120
caccgggcac caacatactg ctcccgaggc cgggctatcc gaactacgag gcgcgcgcag 180
ggctgcacaa cctggaagtt cgccgggttca atctgatccc cgagagagggg tggga 235

<210> 292

<211> 398

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<400> 292

cccacgcgtc cgggtggtggt ctctagtcctc gcgcagccgg gcaccaacat actgctcccg 60
aggccggggt atccgaacta cgaggcgcgc gcagggtgac acaacctgga agttcgccgg 120
ttcaatctga tccccgagag aggggtgggag attgacatcg acggtctgga gtcgatcgcc 180
gacaagaaca ccaccgccat ggtcatcata aaccccaaca acccttgccg gagtgtctac 240
accctgagc atttggccaa ggtcgccgag gtggcaagga agcttggaat actgggtcatc 300
gctgatgagg tgtatggaaa tctggtgttt ggggacaccc ctttcgtccc catgggggtgt 360
cttggccaca ttgcccctgg gttgaccata ngatcact 398

<210> 293

<211> 246
 <212> DNA
 <213> Glycine max

<400> 293

cgtttttctc accattggtg gcacacaagc catagatata attttacctt ccctagcacg 60
 tcctggtgcc aacattctcc ttccaaaacc agggtagcca cattatgaac ttctgtccac 120
 tcgttgtctt cttgaaattc gacactttga tcttttgctt gagagaggat gggaagttga 180
 ccttgactct ttggaagctt tggcagatga gaacactgtg gccattgttt tcatcagtc 240
 tagtag 246

<210> 294
 <211> 262
 <212> DNA
 <213> Glycine max

<400> 294

cgaacccttc agtcacacaa gtttcgtggc tatgctccca ctgcaggtct tccacaggcc 60
 aggattgcca ttgctgaata cctgtctcgt gaccttcctt accaattatc aaatgaggat 120
 gtttatatca cttgtggatg cacacaagcc attgatgatt cagtggcaat gcttgctcgc 180
 cccggtgcaa acatcttgc tccaagacca ggcttccac tctatgaact tagtgcttca 240
 tttagagggg ttgaagtgg gc 262

<210> 295
 <211> 264
 <212> DNA
 <213> Glycine max

<400> 295

tgcttccaga gaaagggttg gaggttgatc tagatgctgt tgaagctctt gctgatcaga 60
 acacagtggc gttggcgatc ataaacctg ggaatccttg tgggaatgtg tacagttacc 120
 accatttga gaagattgct gaaactgcaa aacgggttg aacaattgtg atctctgatg 180
 aagtttatgg tcaccttgca tttgggagca agccttttgt accgatggga gtttttggct 240
 ctactgttcc tgttctcact cttg 264

<210> 296

<211> 244
 <212> DNA
 <213> Glycine max

<400> 296

tgttcctggt ctgactcttg gctcattttc taagagatgg atagttcctg gatggaggct 60
 tggttgggttt gttacaaatg atccatctgg cacttttaga aatccaaagg tagatgagcg 120
 aattaaaaag tactttgatc ttttgggagg tctgccacc ttcattccagg cagctctacc 180
 tcagataatt gcgcatactg aagagggtttt cttcaagaaa accattgata atttgaggca 240
 tgct 244

<210> 297
 <211> 247
 <212> DNA
 <213> Glycine max

<400> 297

cttgcatctg caggcagcct tttgtgcaa tgggagtttt tggctatatt gttcctgttc 60
 tgaatctagg ctcatcttct aagagatgga tatttcctgg atggaggctt gggttggttg 120
 tgacaaatga tccatctggc acttgtagaa atccaaaggt atatgagcgc tttaaaaagt 180
 actttgatct tttgggaggt gcagccacct tcatccaggc agctgtacct cagataattc 240
 gcatact 247

<210> 298
 <211> 246
 <212> DNA
 <213> Glycine max

<223> unsure at all n locations
 <400> 298

ttgaagaggg tgctgctgat gctcttcaat ctgcgaagtt tcatggctat gctcccactg 60
 ctggacttct ccaggctaga attgcaattg ctgaatatta tctcgtgacc ttccttatca 120
 attatcacga gatgatgtct tcatcaactg tggatgcaca caagccattg atgtttcggg 180
 ggcgatgctt gctcgccctg gtgcaaacat cnttccaagg ccaggcttcc caatctatga 240
 actttg 246

<210> 299
 <211> 396
 <212> DNA
 <213> Glycine max

<400> 299

atagagagta agcctgagat catggaaaaa gttggtgtgg ctgtaaatag caaaaatcaa 60
 gaatccaaag caacttccac cattaccatt aagggtttca tgagccttct aatgaaaagt 120
 gtagatgaga atggtgatgg tagcaagaga gttattttctc tgggtatggg tgacccaact 180
 ctcaccactt attttcccat ctcaaagtga gctgaaaaag ctgttgctga agcacttcag 240
 tcacacaggt ttcgtggcta tgctccact gcaggctctc cacaggccag gattgcaatt 300
 gctgaatacc tgtctcgtga ctttccttac caattatcaa gtgatgatgt ttacatcacc 360
 tgtggatgca cacaagccat tgatgtttca gtggcg 396

<210> 300
 <211> 443
 <212> DNA
 <213> Glycine max

<400> 300

tgggggttgtg gctgtgaaca acaacatcaa caactatgaa tccaaggcaa cttccaccgt 60
 caccattaag ggcatttctca gccttctaata ggaaagcatt gatgatgaga attgtgatgg 120
 tgggtggaagc aagaagagag ttattttctct tgggtatgggt gacccaactc tcaccacatt 180
 gttccacaca ccaaagggttg ttgaagaggc tgctcgtgat gctcttcaat ctgcgaagtt 240
 tcatggctat gctccactg ctggacttct ccaggctaga attgcaattg ctgaatatct 300
 atctcgtgac ctttcttata aattatcacg agatgatgtc ttcatcactt gtggatgcac 360
 acaagccatt gatgtttcgg tggccatgct tgctcgcct ggtgcaaaca tcttgcttcc 420
 aaggccaagc tttccaatct atg 443

<210> 301
 <211> 278
 <212> DNA
 <213> Zea mays

<400> 301

tgtcacgtat catttaaac taatatataa cttttaaatt gaatatttat ttgtaatcat 60

ttttaacgat tatttacaag ttttttctaa tatggcatct tggtttatag aagttcttcc 120
aacagctccg atcgaaattt ttgctcttgc tcgagctttt cgggaagatt cttttgcaga 180
aaaagttgac cttggcattg gagcctatcg tactgatgaa ggtcaaccat ggggtacttcc 240
agttgttcgt gaagccgaaa tcagcattgc caatgata 278

<210> 302
<211> 304
<212> DNA
<213> Zea mays

<400> 302

ctctggagct gaggaaggct atctgcaaaa agcttgagga ggagaatggt ctatcatact 60
ccgccgatca ggtgctagta agcaatggag ccaagcagtg cattacacaa gcagtactcg 120
ctgtctgctc acctggcgat gaagttttga tacctgcacc atattgggtc agctaccctg 180
agatggctag actggctggt gcaacgccag ttattctccc tacaagcata tcagacaatt 240
acctgctaag gccagagtca cttgcctcag tgatcaatga aaattcaagg atcttgattc 300
tctg 304

<210> 303
<211> 128
<212> DNA
<213> Zea mays

<400> 303

agaatttctt gcaaggcact atcacgaggt taaacttttc ttgctcctat ctgttttgct 60
gcttctgat tataatgcat gactgctaaa tcatacaa atattccagc gcactatcta 120
catccac 128

<210> 304
<211> 322
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<400> 304

tgnggagatc acccanaagt cttcacccta tctggcttga acgttaggag ctaccgctat 60

tatgatcctg caacatgcag ccttcacttc gaaggactcc tggaagacct cggttctgct 120
 ccttcagggt caattgtact gctgcatgcc tgtgctcaca accctactgg agtagatcct 180
 accatcgaac agtgggaaca gattaggcag ctgatgagat canaatcact gcttccgttc 240
 ttgacagtg cctatcaagg ctttgcaagt cggagtcttg acnaagatgc tcagtcaagt 300
 cgtatgtttt gtgctgatgg tg 322

<210> 305
 <211> 302
 <212> DNA
 <213> Zea mays

<400> 305

tgcgaggccg agcgccggat cgcgggcaac ctcaacatgg agtaccttcc gatgggaggc 60
 agcatcaaga tgattgaaga gtcactgaag ctggcgtagc gagaagattc tgacttcac 120
 aaagataaga ggatagcagc ggtgcaggcg ctttcaggca ctggtgcctg ccggctcttt 180
 gctgatttcc aaaagcggtt ttgcccggat tcgcagatct acataccaac accaacgtgg 240
 tccaaccatc acaatatattg gagggatgct caagtgccac agaagacatt cacatactac 300
 ca 302

<210> 306
 <211> 138
 <212> DNA
 <213> Zea mays

<400> 306

gttcattctt ttgcttcat gcatgtgctc ataatcccac cgggtgtagct cctacggagg 60
 aaccatggcg cgaaatatcc catcagttca aggtgaacaa acatttacca ttctttgaca 120
 tggaatcacc cgggtttg 138

<210> 307
 <211> 181
 <212> DNA
 <213> Zea mays

<400> 307

gttcattctt ttgcttcat gcatgtgctc ataatcccac cgggtgtagat cctacggagg 60

aacaatggag agaaatatcc catcagttca aggtgaaaaa acattttcca ttctttgaca 120
 tggcatacca agggtttgcc agtggtgatc cagagagagc tgccaaggcc atctgatttt 180
 c 181

<210> 308
 <211> 184
 <212> DNA
 <213> Zea mays

<400> 308

gttcattctt tttgcttcat gcatgtgctc ataataccca ctgtgaagat cctaataaga 60
 ccactggag agaacatata ccatacagt tcaaggtgaa aaaacatttt ccattacttt 120
 gacatggcat accaagggtt tgccagtggg gatccagaga gagatgcca ggcaatccga 180
 attt 184

<210> 309
 <211> 135
 <212> DNA
 <213> Zea mays

<400> 309

aattcattct ttttgcttca tgcattgtgc cataatccca gcggtgtaga tcctatggac 60
 ggactatgga gagaaatgac ccatacagt aaggtgaaaa aacattttcc attctttgac 120
 atggcattca aggg 135

<210> 310
 <211> 310
 <212> DNA
 <213> Zea mays

<400> 310

cagacatatt tgtctctgat ggtgccaaat gtgacatgc tcgcttgag gtcctttttg 60
 gatctaattg gacaattgac gtccaagatc catcataccc tgcatatgtt gattcaagtg 120
 ttatcatggg gaaaactgac ttatcagc aagacgttca gaagtatgga aacattgagt 180
 acatgagatg cggccagaa aatggatttt tctgatctg tcaactgtcc ctaggacaga 240
 tattattttc tttgttcac ccaacaatcc tactgggtgt gctgcatctc gggaccaact 300

aaccaaatta

310

<210> 311

<211> 296

<212> DNA

<213> Zea mays

<400> 311

gctgcggcag gccggcgtgc cggttatcgg tctagccgcg ggggagccag acttcgacac 60

gccgcccgcg atcgcgagg ccgggatggc tgcaattagg aatgggtata caagatacac 120

tcctaattgct gggacttttg agctgaggaa ggctatactg tactaaactc caggagggaa 180

cggggtatcc tacctcccag atgaggtgct ggtgagcaat ggagctaagc aatgcatcac 240

ataagctgtg cttgcagttt gctcacctgg tgatgagggt ttgattccag ccccat 296

<210> 312

<211> 119

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<400> 312

gaccacnagt ggtccaccga ttggactctg gacntgaagg ccatggctgt taggatcatt 60

aacatgaggc aacaactatt tatgcgctga atccagagga anccctgggtg attgagcct 119

<210> 313

<211> 246

<212> DNA

<213> Zea mays

<400> 313

ggctaagatc aagtgtagta tctggtctta tcaatttaat atctgatatg tggactatgt 60

gttcactttg atattaaatt tttttctgt ggcggagagt ccaccaccgt ggcttgccac 120

tggtccccctt gagegtcgct cggactgggc cccttgagcg tcgctcggcc gttgcactac 180

tggtgagcc tggcgcaccc caaccaatcc aattcgagat tttttcccca accaatctaa 240

tttgag 246

<210> 314

<211> 295

<212> DNA
<213> Zea mays

<400> 314

cacttaagga aaatcttgaa aagctaggtt cacctttgtc atgggatcat atcactaatc 60
agattggaat gttctgctac agtgggatga cacctgaaca agttgaccgt ttaacaaatg 120
aataccacat ttacatgacc cgcaatggga ggataagcat ggctgggtgtt acgacaggaa 180
atgttagtta cctagcaa at gcaattcatg aggttaccaa accaaattga gttaggggtcc 240
taccttcttt ggtcgatgga agctgatgga atgagactgt gaagcggcgt ttccc 295

<210> 315
<211> 262
<212> DNA
<213> Zea mays

<400> 315

atcagattgg aatgttctgc tacagtggga tgacacctga acaagttgac cgtttaacaa 60
atgaatacca catttacatg acccgcaatg ggaggataag catggctggt gtaacgacag 120
gaaatgttgg ttacctagca aatgcaattc atgaggttac caaaccaa at tgagttaggg 180
tgctaccttc ttgtgctgat ggaagctgat ggaatgagac tgtgaagcgg cgtttccccc 240
ctctgttcct gacagaaata ag 262

<210> 316
<211> 133
<212> DNA
<213> Zea mays

<400> 316

atcagattgg aatgttctgc tacagtggga tgacacctga acaagttgac cgtttaacaa 60
atgaatacca catttacatg acccgcaatg ggaggataag catggctggt gtaacgacag 120
gaaatgttgg tta 133

<210> 317
<211> 372
<212> DNA
<213> Zea mays

<400> 317

aacgagcaag ggccgcagcc ggagctccaa tggcctcctt ctctccctc tctgcctcct 60
 cctccacctc caccctgtcc ttcaacctcc ccgcaaaaac ctccgctggc acaggtcccc 120
 tgtcattcca cagggcgagg gagtgcaga agtccagggc caggatgggt acggtgcggg 180
 cggaggcggg tgacacgacc atcagcccgc gggatgaatgc gtcaggccg tccaagacca 240
 tggccatcac cgaccaggcc acggcgctgc gacaggccgg cgtgccagtc atcggactcg 300
 ccgctgggga gcccgaactc gacacgccag ccgtgatcgc cgaggctggg ataaatgcca 360
 tcagagatgg gg 372

<210> 318
 <211> 305
 <212> DNA
 <213> Zea mays

<400> 318

cggaaccgtg tcccgtttcg ctctctgccg ccgccaccgc acaagaagct agctcctgcc 60
 tgtaccgcc cgtcatggcg atgctatcca gtgcagctcc tccgcggccc ggcgcccgt 120
 gctgccgcgc cctaggcttc tggcggtgag ggcgatggcg tcgtcgtctc tcggccacgt 180
 cgagccggcg cccaaggacc ccatactcgg cgtcaccgag gctttcctcg ccgaccctc 240
 gtccgacaaa gtgaacgtcg gcgtcggcgc ctaccgggac gacaacggcc agcccgtcgt 300
 gctca 305

<210> 319
 <211> 294
 <212> DNA
 <213> Zea mays

<400> 319

cggaaccgtg ggacaaaagc ccacagcttc ttctccctac tctccagtc ctccgtcctc 60
 cgtttcgtc tctgccgcgc ccaccgcaca agaagctagc tctgcctgt accgccccgt 120
 catggcgatg ctatcccgcg cacctcctcc gcggcccggc gcccgctgct gccgcgcct 180
 aggcttctgg cggtaggggc gatggcgctc tcgtctctcg gccacgtoga gccggcgccc 240
 aaggaccca tctcggcgt caccgaggct ttctcgcgcg acccctcgtc cgac 294

<210> 320
 <211> 263
 <212> DNA
 <213> Zea mays

<400> 320

caagaagcta gctcctgcct gtaccgcccc gtcattggcga tgctatcccc cgcgcgctcc 60
 tccgctgccc ggcgcccgtc gctgccgcgc cctaggcttc tggcgggtgag ggcgatggcg 120
 tcgtcgtctt tcggccacgt cgagccggcg gccaaaggacc ccattcctcg cgtcaccgag 180
 gctttcctcg ccgacgcctc gtccgacaaa gtgaacgtcg gcgtcggcgc ctaccgggac 240
 gacaacgggc agcccgtcgt gct 263

<210> 321
 <211> 290
 <212> DNA
 <213> Zea mays

<400> 321

gtgacaaaag cccacagctt cttctcccta ctctccagt cctccgtcat ccgtttcgtc 60
 ctctgccgcg gccaccgcac aagaagctag ctctgcctg taccgccccg tcatggcgat 120
 gctatcccg cgcagctctc cgcggcccgg cgcgcgtgc tgcgcgcgc taggcttctg 180
 gcgggtgagg cgatggcgtc gtcgctcttc ggccacgtcg agccggcgcc caaggacccc 240
 atcctcggcg tcaccgaggc tttcctcgcc gacccctcgt ccgacaaagt 290

<210> 322
 <211> 319
 <212> DNA
 <213> Zea mays

<400> 322

gaaaattgca gatgtcattc aagagaaaaa gcatatgcca ttctttgatg ttgcatatca 60
 aggttttgcc agtagaagcc ttgatgaaga tgcattttct gtcaggcttt ttgttaagcg 120
 tggcatggaa gtatttggtg cacaatctta cagcaagaac cttggtctat attctgaaag 180
 gattggtgcg ataaatgtcg tgtgctcagc accagaagtt gcagataggg taaagagcca 240
 gctgaaacga ttggcacgtc ccattgtact gaacccccct attcacggtg ccaagatagt 300
 tgccaacggt gttggtgat 319

<210> 323
 <211> 295
 <212> DNA
 <213> Zea mays

<400> 323

ggttggtgca ataaatgtcg tgtgctcagc accagaagtt gcagataggg taaagagcca 60
 gctgaaacga ttggcacgtc ccatgtactc gaacccccct attcacggtg ccaagatagt 120
 tgccaacggt gttggtgatc caaccatggt tgggtgaatgg aaacaagaga tggagctaata 180
 ggctggacgg atcaagaatg taagacagaa gctctacgac agtttgtctg ccaaggacaa 240
 gagcggcaag gactggtctt tcattctgag gcagattggc atgttctcct acacc 295

<210> 324
 <211> 291
 <212> DNA
 <213> Zea mays

<400> 324

aatcttacag caagaacctt ggtctatatt ctgaaagggt tgggtcgcata aatgtcgtgt 60
 gctcagcacc agaagttgca gatagggtaa agagccagct gaaacgattg gcacgtccca 120
 tgtactcgaa cccccctatt cacggtgccca agatagttgc caacgttggt ggtgatccaa 180
 tcatgtttgg tgaatggaaa caagagatgg agctaattggc tggacggatc aagaatgtaa 240
 gacagaagct ctacgacagt ttgtctgccca aggataagag cggcaaggac t 291

<210> 325
 <211> 278
 <212> DNA
 <213> Zea mays

<400> 325

cccacgcgtc cgcaactcct gaacagtggg agaaaattgc agatgtcatt caagagaaaa 60
 agcatatgcc attctttgat gttgcatatc agggttttgc cagtggaagc cttgatgaag 120
 atgcattttc tgtcaggctt tttgttaagc gtggcatgga agtgtttggt gcacaatctt 180
 acagcaagaa ccttggttta tattctgaaa gggttggtgc aataaatgtc gtgtgctcag 240
 caccagaagt tgcagatagg gtaaatagcc agctgaaa 278

<210> 326

<211> 318

<212> DNA

<213> Zea mays

<400> 326

cccacgcgtc cgctaattggc tggacggatc aagaatgtaa gacagaagct ctacgacagt 60
ttgtctgccca aggataagag cggcaaggac tggctcttca ttctgaggca gattggcatg 120
ttctcctaca ccggcttgaa caaagcacag agtgacaaca tgacggataa atggcatatt 180
tacatgacca aggatgggcg gatctcctta gctgggctgt ccctggctaa gtgtgattat 240
cttgccgacg ccatcatcga ttccttccat aatgtgaact aggctgaggt acgatagttg 300
agggtcaagc tattgatg 318

<210> 327

<211> 271

<212> DNA

<213> Zea mays

<400> 327

ctttttgtta agcgtggcat ggaagtgttt gttgcacaat cttacagcaa gaaccttggt 60
ctatattctg aaagggttgg tgcgataaat gtcgtgtgct cagcaccaga agttgcagat 120
agggtaaaga gccagctgaa acgattggca cgtcccatgt actogaaccc ccctattcac 180
ggtgccaaga tagttgccaa cgttgttggt gatccaatca tgtttggtga atggaaacaa 240
gagatggagc taatggctgg acggatcaag a 271

<210> 328

<211> 251

<212> DNA

<213> Zea mays

<400> 328

gccattcttt gatgttgcac atcagggttt tgccagtgga agccttgatg aagatgcatt 60
ttctgtcagg ctttttgtta agcgtggcat ggaagtgttt gttgcacaat cttacagcaa 120
gaatcttggg ttatattctg aaagggttgg tgcaataaat gtcgtgtgct cagcaccaga 180
agttgcagat agggtaaata gccagctgaa acgattggca cgtcccatgt actogaaccc 240

ccctattcac g

251

<210> 329
<211> 263
<212> DNA
<213> Zea mays

<400> 329

gccattcttt gatgttgc atcagggttt tgccagtggg agccttgatg aagatgcatt 60

ttctgtcagg ctttttggtt agcgtggcat ggaagtgttt gttgcacaat cttacagcaa 120

gaaccttggg ttatattctg aaagggtgtg tgcaataaat gtcgtgtgct cagcaccaga 180

agttgcagat agggtaaata gccagctgaa acgattggca cgtcccatgt actcgaaccc 240

ccctattcac ggtgccaaga tag 263

<210> 330
<211> 274
<212> DNA
<213> Zea mays

<400> 330

tgaatggaaa caagagatgg agctaattggc tggacggatc aagaatgtaa gacagaagct 60

ctacgacagt ttgtctgcca aggacaagag cggcaaggac tgggtctttca ttctgaggca 120

gattggcatg ttctcctaca ccggcttgaa caaagcgcag agtgacaaca tgacggataa 180

atggcatatt tacatgacca aggatgggag gatctcgtaa gctgggctgt ccctggctaa 240

gtgtgattat cttgccgacg ccatcatoga ttct 274

<210> 331
<211> 252
<212> DNA
<213> Zea mays

<400> 331

taaagagcca gctgaaacga ttggcacgtc ccatgtactc gaacccccct attcacggtg 60

ccaagatagt tgccaacgtt gttggtgatc caatcatgtt tggatgaatg aaacaagaga 120

tggagctaat ggctggacgg atcaaggatg taagacagaa gctctacgac agtttgtctg 180

ccaaggataa gagcggcaag gactgggtctt tcattctgag gcagattggc atgttctcct 240

acaccggctt ga

252

<210> 332
<211> 240
<212> DNA
<213> Zea mays

<400> 332

gcacaatctt acagcaagaa ccttggttta tattctgaaa gggttggtgc aataaatgtc 60
gtgtgctcag caccagaagt tgcagatagg gtaaatagcc agctgaaacg attggcacgt 120
cccatgtact cgaacccccc tattcacggt gccaaagatag ttgccaacgt tgttggtgat 180
ccaaccatgt ttggtgaatg gaaacaagag atggagctaa tggctggacg gatcaagaat 240

<210> 333
<211> 268
<212> DNA
<213> Zea mays

<400> 333

caagagcggc aaggactggc ctttcattct gaggcagatt ggcattgtct cctacaccgg 60
cttgaacaaa gcgcagagtgc acaacatgac ggataaatgg catatttaca tgaccaagga 120
tgggcggatc tcgttagctg ggctgtccct ggctaagtgt gattatcttg ccgacgccat 180
catcgattcc ttccataatg tgaactaggc tgagatatgg agcaacaacg acggcggaga 240
agctgttttg cgtccacgac acaagctg 268

<210> 334
<211> 251
<212> DNA
<213> Zea mays

<400> 334

tgtttggtga atggaaacaa gagatggagc taatggctgg acggatcaag aatgtaagac 60
agaagctcta cgacagtttg tctgccaggg ataagagcgg caaggactgg tctttcattc 120
tgaggcagat tggcaggtct cctacaacgg cttgaacaaa gcacagagtt accacatgac 180
gggtaaattg gctaattaac atgaccaaga tgggcggatc tccttagctg ggctgtccct 240
ggctaagtgt g 251

<210> 335

<211> 249

<212> DNA

<213> Zea mays

<400> 335

gtgattatct tgccgacgcc atcatcgatt ccttccataa tgtgaactag gctgaggtac 60

gatagttgag ggtcaagcta ttgatgttta gttccgtgga cgctaggctg ggatttttgg 120

gtccttccag ctatacagct cttccgttgt gctccatctg gtgtaacttg gataaataaa 180

aattttgtcg ctgaactaaa actcgtgtgc ttttttacct gtaactgtaa ggtcagcgcg 240

tggctacag 249

<210> 336

<211> 193

<212> DNA

<213> Zea mays

<400> 336

gtcgctgaac taaaaaatat tttatgatcc aagttacacc agatggagca caacggaaga 60

gctgtatagc tggaaggacc caaaaatccc agcctagcgt ccacggaact aaacatcaat 120

agcttgaccc tcaactatcg tacctcagcc tagttcacat tatggaagga atcgatgatg 180

gcgtcggcaa gat 193

<210> 337

<211> 314

<212> DNA

<213> Zea mays

<400> 337

cggacgcgtg gcgagacgog tgggctcoct tcttcagtgc agcagcaggc cagcgagacc 60

caccaccctc actccgcct ccgatccgct gcttactcgc caccggaga tggccaccgc 120

cgcgccttc tccgtctcct cgcggcggc ctcgcgcgc gccgcgcgat ccaaggtgtt 180

tggaggagtt aaccaggcga gaactagaac tggctgccgc gtcggcatca cgcggaagaa 240

ctttggccgt gtcgatgatg cccttgagc ggatgtttct cgttttgaag gaggccaat 300

ggctcctcca gacc 314

<210> 338
 <211> 285
 <212> DNA
 <213> Zea mays

<400> 338

aagcgacggg cgtcatatcc catcctgata tctcctccct tcttcagtgc agcagcaggc 60
 cagcagcacg ccacccgccc cactcctgcc tccgatccgc tgcttactcg ccacccggag 120
 atggccaccg ccgccgcctt ctccgtctcc tcgccggcgg cctccgcctg ccgccgcgca 180
 tccaaggtgt ttggaggagg agttaaccag gcgagaacta gaactggctg ccgcgtcggc 240
 atcacgcgga agaactttgg ccgtgtcatg atggcccttg cagtg 285

<210> 339
 <211> 263
 <212> DNA
 <213> Zea mays

<400> 339

cccacgcgtc cgactagttc tagttctcgc ctggttaact cctccaaaca ccttggatcg 60
 cgcggcgacg gcggaggccg ccggcgagga gacggagaag gcggcggcgg tggccatctc 120
 cgggtggcga gtaagcagcg gatcggaggc ggtagtgagg cgggtggcgt gccgctggcc 180
 tgctgctgca ctgaagaagg gacgcgcccc tatatacgga ggggcccagag ctcatcgccg 240
 cgccccctcc ctccctgcgc ctg 263

<210> 340
 <211> 116
 <212> DNA
 <213> Zea mays

<400> 340

ctcccgctc cgatccgctg ctactcgcc acccgagat ggccaccgcc gccgccttct 60
 ccgtctctc gccggcgcc tccgcgctg ccgcgcgata caaggtgttt ggagga 116

<210> 341
 <211> 260
 <212> DNA
 <213> Zea mays

<400> 341

atggagcact actgcttaga agatgctcat attgtcaacc tcttctcggt ctcaaaggct 60
tatggaatga tgggggtggcg tgtaggatac attgcatttc caaatgaagc tgatggcttc 120
catgatcagc tcctcaaggt gcaagacaac ataccgatct gcgcctccat catcggggcag 180
cgcttggcgc tctactcgct ggaggccggc cccgagtgga tcaaagaacg ggtgaaagac 240
ctggtgaaaa accgggcgct 260

<210> 342

<211> 274

<212> DNA

<213> Zea mays

<400> 342

ctttatgtat gatggaatgg agcactactg cttagaagat gctcatattg tcaacctctt 60
ctcgttctca aaggcttatg gaatgatggg gtggcgtgta ggatacattg catttccaaa 120
tgaagctgat ggcttccatg atcagctcct caagggtgcaa gacaacatac cgatctgcgc 180
ctccatcatc gggcagcgcg ggcgctctac tcgctggagg ccggccccga gtggatcaaa 240
gaacgggtga aagacctggt gaaaaaccgg gcgc 274

<210> 343

<211> 320

<212> DNA

<213> Zea mays

<400> 343

ctttagggag ctgccagggtg tcaagatata ggaacctcag ggagccttct atttattcat 60
cgacttcagc tcgtactatg ggtctgaggt ggaagggtttt ggtaccatca aggactctga 120
gtccctctgt ctgttcctgt tggagaaggc acagggttgcg cttgtccctg gggatgcatt 180
tggcgatgac aagggtgttc gcatttcata tgctgcagct atgtcgacac tgcaaactgc 240
aatgggaaag ataaaagaag cgatggctct gctcaggcac cctgttgccg ttttaacaaaa 300
ccaacgtatc gctaatacgt 320

<210> 344

<211> 295

<212> DNA
 <213> Zea mays
 <223> unsure at all n locations
 <400> 344

gttgatcaat aatccgtcac gtgtcaagga gtacctacca atcaccgggtc tggctgaatt 60
 caataagctg agcgctaagc ttatctttgg cgctgacagc cctgctattc aggagaatag 120
 ggttgctacc gtgcagtgcc tatcgggtac tggttcttta gaagtcggag gtgaatttct 180
 tgcaaggcac tatcacgagc gcactatcta catcccacaa ccaacctggg ganatcaccc 240
 aaagtcttca cctatctggc ttgaacgtag gagctacgct atatgatctg cacat 295

<210> 345
 <211> 299
 <212> DNA
 <213> Zea mays
 <400> 345

gttgatcaat aatccgtcac gtgtcaatga gtatctacca atcaccgggtc tggctgaatt 60
 caataagctg agcgctaagc ttatcttttag cgctgacagc cctactattc aggagaatag 120
 ggttgctacc gtgcagtgcc tatcgggtac tggttacttta agagtcggag gtgaatttgc 180
 ttgcaaggca ctatcacgag cgcactatct acatcccaca accaacctgg ggaaatcacc 240
 caaaagtctt caccctatct ggcttgaacg ttaggagcta ccgctattat gatcctgca 299

<210> 346
 <211> 267
 <212> DNA
 <213> Zea mays
 <400> 346

ctcgagccgc ggtctggctg aattcaataa gctgagcgct aagcttatct ttggcgctga 60
 cagccctgct attcaggaga atagggttgc tacctgacag tgcctatcgg gtactgggtc 120
 ttttaagagtc ggaggtgaat ttcttgcaag gcactatcac gagcgacta tctacatccc 180
 acaaccaacc tggggaaatc acccaaaagt cttcacccta tctggcttga acgttaggag 240
 ctaccgctat tatgatctg caacatg 267

<210> 347

<211> 269
 <212> DNA
 <213> Zea mays

<400> 347

ctcgaatcgt tccccacccat ggcgtcgcag ggatcctccg tcttcgccgc actcgagcag 60
 gccccggagg accccatcct cggagtgcacc gttgcctaca acaaggatcc cagccccgtg 120
 aaggtcaacc tcggggtcgg cgcctaccgg accgaggaag ggaagcccct agtgctgaac 180
 gtggtcaggc gcgccgagca aatgttgatc aataatccgt cacgtgtcaa ggagtaccta 240
 ccaatcaccg gtctggctga attcaataa 269

<210> 348
 <211> 294
 <212> DNA
 <213> Zea mays

<400> 348

gcagcagaca cctccgccac ctccaccctc gaatcggtcc ccaccatggc gtcgcaggga 60
 tcctccgtct tcgccgcaact cgagcaggcc ccggaggacc ccatactcgg agtgaccgtt 120
 gcctacaaca aggatcccag ccccggtgaag gtcaacctcg gggtcggcgc ctaccggacc 180
 gaggaagggga agcccctagt gctgaacgtg gtcaggcgcg ccgagcaaataa gttgatcaat 240
 aatccgtcac gtgtcaagga gtacctacca atcaccggtc tggctgaatt cata 294

<210> 349
 <211> 264
 <212> DNA
 <213> Zea mays

<400> 349

agcagacacc tccgccacct ccaccctcga atcggtcccc accatggcgt cgcagggatc 60
 ctccgtcttc gccgcaactcg agcaggcccc ggaggacccc atcctcggag tgaccgttgc 120
 ctacaacaag gatcccagcc ccgtgaaggt caacctcggg gtcggcgcct accggaccga 180
 ggaaggggaag cccctagtgc tgaacgtggt caggcgcgcc gagcaaataa tgatcaataa 240
 tccgtcacgt gtcaaggagt acct 264

<210> 350

<211> 304
 <212> DNA
 <213> Zea mays

<400> 350

cagacacctc cgccacctcc accctcgaat cgttccccac catggcgctcg cagggatcct 60
 ccgtcttcgc cgcactcgag caggccccgg tagaccccat cctcggagtg accgttgcc 120
 acaacaagga tcccagcccc atgaaggtea acctcggggg tggcgccctac cggaccgagg 180
 aaggaagcc cctagtgtg aacgtggtca ggcgcgccga gcaaatgttg atcaataatc 240
 cgtcacgtgt caaggagtac ctaccaatca ccggtctggc tgaattcaat aagctgagcg 300
 ctaa 304

<210> 351
 <211> 284
 <212> DNA
 <213> Zea mays

<400> 351

gcagcagaca cctctccac ctccacctc gaatcggtcc ccaccatggc gtgcagggga 60
 tcttcgtct tcgcgcact cgagcaggcc ccggaggacc ccctcctcg agtgaccgtt 120
 gcctacaaca aggatcccag ccccgtaga gtcaacctcg gggtcggcgc ctaccggacc 180
 gaggaaggga agcccctagt gctgaacgtg gtcaggcgcg ccgagcaaat gttgatcaat 240
 aatccgtcac gtgtcaagga gtacctacca atcacgggtc tggc 284

<210> 352
 <211> 291
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <400> 352

cagacaccac cgccacctcc accctcgaat cgttccccac catggcgctcg cagggatcct 60
 ccgtcttcgc cgcactcgag caggccccgg aggaccccat cctcggagtg accgttgcc 120
 acaacaagga tcccagcccc gtgaaggtea acctcggggg cggcgccctac cggaccgagg 180
 aaggaagcc cctagtgtg aacgtagtca ggcgcgccga gcaaatgttg atcaataatc 240
 cgtcacgtgt caaggagtac ctaccaatca ccggtctggc tgaattcaat a 291

<210> 353
 <211> 281
 <212> DNA
 <213> Zea mays

<400> 353

gcagcagaca cctcgccacc tccaccctcg aatcggtccc caccatggcg tcgcagggat 60
 cctccgtctt cgccgcactc gagcaggccc cggaggaccc catcctcgga gtgaccgttg 120
 cctacaacaa ggatcccagc cccgtgaagg tcaacctcgg ggtcggcgcc taccggaccg 180
 aggaagggaa gcccctagtg ctgaacgtgg tcaggcgcg cagagcaa atg ttgatcaata 240
 atccgtcacg tgtcaaggag tacctaccaa tcaccggtct g 281

<210> 354
 <211> 247
 <212> DNA
 <213> Zea mays

<400> 354

cagcagacac ctccgccacc tccaccctcg aatcggtccc caccatggcg tcgcagggat 60
 cctccgtctt cgccgcactc gagcaggccc cggaggaccc catcctcgga gtgaccgttg 120
 cctacaacaa ggatcccagc cccgtgaagg tcaacctcgg ggtcggcgcc taccggaccg 180
 aggaagggaa gcccctagtg ctgaacgtgg tcaggcgcg cagagcaa atg ttgatcaata 240
 atccgtc 247

<210> 355
 <211> 266
 <212> DNA
 <213> Zea mays

<400> 355

gccacctcca tcctogaatc gttccccacc atggcgtcgc agggatcctc cgtcttcgcc 60
 gcactcgagc aggccccgga ggaccccatc ctcgagtgga ccgttgccca caacaaggat 120
 cccagccccg tgaaggtcaa cctcggggtc ggcgcctacc ggaccgagga agggaagccc 180
 ctagtgctga acgtggtcag gcgcgcccag caaatgttga tcaataatcc gtcacgtgtc 240
 aaggagtacc taccaatcac ggtctg 266

<210> 356
 <211> 274
 <212> DNA
 <213> Zea mays

<400> 356

cagcagacac ctccgccacc tccaccctcg aatcggtccc caccatggcg tcgacaggat 60
 cctccgtctt cgccgcactc gagcaggccc cgaggagccc catcctcgga gtgaccgttg 120
 cctacaacaa ggatcccagc cccgtgaagg tcaacctcgg ggtcggcgcc taccggaccg 180
 aggaagggaa gcccctagtg ctgaacgtgg tcaggcgcgc cgagcaaata ttgatcaata 240
 atccgtcacg tgtcaaggag tacctacca tcaac 274

<210> 357
 <211> 299
 <212> DNA
 <213> Zea mays

<400> 357

gtgcgcgctg cgcaggcgca gggccccagc gccgaccgca gattaagtac gctagtgggg 60
 cacctgctgc ctccctcccc acgaagagca gcagcagaca cctccgccac ctccaccctc 120
 gaatcggtcc ccaccatggc gtgcgaggga tcctccgtct tcgccgcaact cgagcaggcc 180
 ccggaggacc ccacccctcg agtgaccgtt gcctacaaca acgatcccag ccccgtagac 240
 gtcaacctcg gggtcggcg ctagcgagc gaggaaggga agcccctagt gctgaacgt 299

<210> 358
 <211> 251
 <212> DNA
 <213> Zea mays

<400> 358

cagacacctc cgccacctcc accctcgaat cgttccccac catggcgctc caaggatcct 60
 ccgtcttcgc cgcactcgag caggcaccgg aggacaccat cctcggagtg accgttgccct 120
 acaacaagga tcccagcccc gtgaagggtc acctcggggg cggcgccctac cggaccgagg 180
 aagggaagcc cctagtgtcg aacgtgggtc ggcgcgccga gcaaatgttg atcaataatc 240
 cgtcacgtgt c 251

<210> 359
 <211> 237
 <212> DNA
 <213> Zea mays

<400> 359

ctgacgcgtg gctggacgcg tggggcagca gacacctccg ccacctccac cctcgaatcg 60
 taccacacca tggcgtcgca tggatcctcc gtcttcgccg cactcgagca ggccccggag 120
 gaccccatcc tcggagtgcg cgttgccctac aacaaggatc ccagccccgt gaagggtcaac 180
 ctcgggggtcg gcgcctaccg gaccgaggaa gggaagcccc tagtgctgaa cgtgggtc 237

<210> 360
 <211> 175
 <212> DNA
 <213> Zea mays

<400> 360

tgcgcctacc ggaccgacga agggaagccc tagtgctgaa cgtgggtcagg cgcgccgagc 60
 aaatgttgat caataatccg tcacgtgtca aggagtacct accaatcacc ggtctgggtc 120
 aattcaataa gctgagcgcg aagcttatct ttagcgcgtga cagccctgct attca 175

<210> 361
 <211> 447
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <400> 361

agctgcttta gcgtactaac tcgnaatcga ctcgacagca cagacacctc cgccacctcc 60
 actctcgaat cgttcccacc atggcgctgc agcngatcct cgcgtcattc gcacgcagct 120
 cgagcgaggc actcgggagg gacncgcatg cctccggacg tnggaccgta tgcactacat 180
 gacataagga tccccagct cccagtmana ngggtcaacc attcggnggt cggcggcctt 240
 acgtcggacc gaggggaagg aagctcctag tgctgaacgt ggtcaggcgc gccgagcana 300
 tgttgatcaa taatccgtca cgtgtcaagg agtacctaca atcacagtca tgctgaattc 360
 ataactgacg ctaacttata ttgcgtgaca gctgctatca gagataggtc tacgtcatgc 420

tacggtctgt cttagatcga gtgatct

447

<210> 362
<211> 274
<212> DNA
<213> Zea mays

<400> 362

gacacctccg ccacctccac cctcgaatcg ttccccacca tggcgtcgca gggatcctcc 60
gtcttcgccg cactcgagca ggccccggag gaccccatcc tcggagtgac cgttgcctac 120
aacaaggatc ccagccccgt gaaggtaaac ctcggggtcg gcgcctaccg gaccgaggaa 180
gggaagcccc tagtgctgaa cgtggtcagg cgcgccgagc aaatgttgat caataatccg 240
tcacgtgtca aggagtacct accaatcacc ggtc 274

<210> 363
<211> 163
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<400> 363

cagcagcaga cacctccgcc acctccaccc tcgaatcggt cccaccatg gcgtgctcgg 60
atcctccgtc ttccgccgac tcgagcaggc cccggaggac cccatcctcg gtctcanagt 120
tgcctacaac aaggatccca gccccgtgaa ggtcaacctc ggg 163

<210> 364
<211> 280
<212> DNA
<213> Zea mays

<400> 364

tgacactccg ccacctccac cctogaatcg ttccccacta tggcgtcgca gggatcctcc 60
gtcttcgccg cactcgagca ggccccggag gaccccatcc tcggagtgac cgttgcctac 120
aacaagggat ccagccccgt gaaagtcaac ctcgggggtc ggcgctaacg gaaccgagga 180
agggaacccc tagtgctgaa cgtgttaage gcgcgagcaa tgttgatcat aatcgtcagt 240
gtcaggagta ctaccatcac gttctgctga atcatagctg 280

<210> 365
 <211> 128
 <212> DNA
 <213> Zea mays

 <223> unsure at all n locations
 <400> 365

ctcgaaatcgt tcnccaccat ggcgtcgcag ggatcctccg tcttcgccgc actcgagcag 60
 gcaccggagg actccatcct cggagtgcac gttgcctaca acaaggatcn cagccccgtg 120
 aaggtcaa 128

<210> 366
 <211> 183
 <212> DNA
 <213> Zea mays

<400> 366
 gcagacacct ccgccacatc cactctcgaa tcgttcccca ccatggcgct gcagggatcc 60
 tccgtcttcg ccgcactcga gcaggccccg gaggacacca tctcggagt gaccgttgcc 120
 tacaacaagg atcccagccc cgtgaacgct aacctcgggg tcggcgccta caggaccgag 180
 gaa 183

<210> 367
 <211> 324
 <212> DNA
 <213> Zea mays

<400> 367
 cccacgcgct cgggcggaga catgggtagc ttcgctaagc tggcgaggag ggcggtggag 60
 acggacgctc cgggtcatggt gaagatacaa gaactgctcc gaggggcca ggatgtgatg 120
 tcgcttgccg agggagttgt ttactggcaa cctcccgagt cagctatgga taagatcgaa 180
 aagatcatca gggaaccaat agtcagtaaa tatggttctg atgatgggct tctgagctt 240
 cgagaagcac ttctcgaaaa gctaagcaga gagaacaagc ttaccaaato atcagtcagt 300
 gtcactgctg gtgcaaatca ggct 324

<210> 368
 <211> 327
 <212> DNA

<213> Zea mays

<400> 368

gtgccaatgg ctctccaga cccaattctt ggggtttctg aggcctttaa agcagataaa 60
agcgagctga agctcaatct tgggtgttgg gcctatagga cagaagagct gcagccctac 120
gtgctcaatg tagtcaagaa ggctgaaaat cttatgttgg agaaaggaga aaacaaagag 180
tatcttccca ttgaaggttt agccgcgttt aacaaagcaa cagcagagct attgcttgga 240
gctgataacc ctgttattaa tcaaggactg gttgctacac ttcagtctct ctcgggcact 300
ggatcactgc gtctcgtgc agcattc 327

<210> 369

<211> 318

<212> DNA

<213> Zea mays

<400> 369

gcgtttaaca aagcaacagc agagctattg cttggagctg ataaccctgt tattaatcaa 60
ggactgggtg ctacacttca gtctctctcg ggactggat cactgcgtct cgctgcagca 120
ttcatacaaa gatactttcc tgaagctaaa gtgctgatat cgtcgctac ctggggtaac 180
cacaagaata ttttcaatga tgctagggtta cttgggtcag agtacaggta ctatgacccc 240
aagactgttg ggttggattt tgagggaatg atagctgata ttgaggctgc tcctgaagga 300
tcttttggtc tgctacat 318

<210> 370

<211> 319

<212> DNA

<213> Zea mays

<400> 370

agagctgcag ccctacgtgc tcaatgtagt caagaaggct gaaaatctta tgttgagaa 60
aggagaaaac aaagagtatc ttcccattga aggttagcc gcgtttaaca aagcaacagc 120
agagctattg cttggagctg ataaccctgt tattaatcaa ggactgggtg ctacacttca 180
gtctctctcg ggactggat cactgcgtct cgctgcagca ttcatacaaa gatactttcc 240
tgaagctaaa gtgctgatat cgtcgctac ctggggtaac cacaagaata ttttcaatga 300

tgctagggtta ccttggtca

319

<210> 371
<211> 301
<212> DNA
<213> Zea mays

<400> 371

gaagctaaag tgctgatatc gtcgcctacc tggggtaacc acaagaatat cttcaatgat 60

gctagggtac ttggtcagag tacaggtact atgaccccaa gactgttggg ttggattttg 120

agggaaatgat agctgatatt gaggctgctc ctgaaggatc tttgtttctg ctacatgggt 180

gtgctcacia cccaactgga atagacccaa ctctgaaca gtgggagaaa attgcagatg 240

tcattccaga gaaaaagcat atgacattct ttgatgttgc atatcaagggt ttgcccagtg 300

g 301

<210> 372
<211> 264
<212> DNA
<213> Zea mays

<400> 372

ttttgagggga atgatagctg atattgaggc tgctcctgaa ggatcttttg ttctgctaca 60

tggttgtgct cacaacccaa ctggaataga cccaactcct gaacagtggg agaaaattgc 120

agatgtcatt caagagaaaa agcatatgcc attctttgat gttgcatatc aagggttttg 180

cagtggaagc cttgatgaag atgcattttc tgtcaggctt tttgttaagc gtggcatgga 240

agtgtttggt gcacaatctt acag 264

<210> 373
<211> 293
<212> DNA
<213> Zea mays

<400> 373

attggggttt ctgaggcctt taaagcagat aaaagcgagc tgaagctcaa tcttggtggt 60

ggtgcctata ggacagaaga gctgcagccc tacgtgctca atgtagtcaa gaaggctgaa 120

aatcttatgt tggagaaagg agaaaacaaa gagtatcttc ccattgaagg tttagccgcg 180

tttaacaaag caacagcaga gctattgctt ggagctgata accctgttat taatcaagga 240
 ctgggttgcta cacttcagtc tctctcgggc actggatcac tgcgtctcgc tgc 293

<210> 374
 <211> 285
 <212> DNA
 <213> Zea mays

<400> 374

tggattttga gggaatgata gctgacattg aggctgctcc tgaaggttct tttgttctgc 60
 tacatgggtg tgctcacaac ccaactggaa tagaccaaac tctgaacag tgggagaaaa 120
 ttgcagatgt cattcaagag aaaaagcata tgccattctt tgatgttgca tatcagggtt 180
 ttgccagtgg aagccttgat gaagatgcat tttctgtcag gctttttgtt aagcgtggca 240
 tggaagtgtt tgttgcaaa tcttacagca agaaccttgg tttat 285

<210> 375
 <211> 275
 <212> DNA
 <213> Zea mays

<400> 375

caagaaggct gaaaatctta tggttgagaa aggagaaaac aaagagtatc ttccattga 60
 aggttttagcc gcgtttaaca aagcaacagc agagctattg cttggagctg ataacctgt 120
 tattaatcaa ggactgggtg ctacacttca gtctctctcg ggcactggat cactgcgtct 180
 cgctgcagca ttcatataaa gatactttcc tgaagctaaa gtgctgatat cgtcgcctac 240
 ctggggtaac cacaagaata tcttcaatga tgcta 275

<210> 376
 <211> 268
 <212> DNA
 <213> Zea mays

<400> 376

gataaaagcg cactgaagct caatcttggt gttggtgcct ataggacaga agagctgcag 60
 ccatacgtgc tcaatgtagt caagaaggct gaaaatctta tggttgagaa aggagaaaac 120
 aaagagtatc ttccattga aggttttagcc gcgtttaaca aagcaacagc agagctattg 180

cttgagctg ataaccctgt tattaatcaa ggactggttg ctacacttca gtctctctcg 240
ggcactggat cactgcgtct cgctgcag 268

<210> 377
<211> 261
<212> DNA
<213> Zea mays

<400> 377

agcagataaa agcgagctga agctcaatct tgggtgttgg gcctatagga cagaagagct 60
gcagccatac gtgctcaatg tagtcaagaa ggctgaaaat cttatgttgg agaaggagaa 120
aaciaagagt atcttcccat tgaaggttta gccgcgttta acaaagcaac agcagagcta 180
ttgcttggag ctgataaccc tgttattaat caaggactgg ttgctacact tcagtctctc 240
tcgggcactg gatcactgcg t 261

<210> 378
<211> 261
<212> DNA
<213> Zea mays

<400> 378

tggattttga gggaatgata gctgacattg aggctgctcc tgaaggttct tttgttctgc 60
tacatggttg tgctcacaac ccaactggaa tagacccaac tctgaacag tgggagaaaa 120
ttgcagatgt cattcaagag aaaaagcata tgccattctt tgatgttgca tatcagggtt 180
ttgccagtgg aagccttgat gaagatgcat tttctgtcag gctttttgtt aagcgtggca 240
tggaagtgtt tgttgcacaa t 261

<210> 379
<211> 247
<212> DNA
<213> Zea mays

<400> 379

gagtgccaat ggctcctcca gacccaattc ttggggtttc tgaggccttt aaagcagata 60
aaagcgagct gaagctcaat cttggtgttg gtgcctatag gacagaagag ctgcagccct 120
acgtgctcaa tgtagtcaag aaggctgaaa atcttatgtt ggagaaagga gaaaacaaag 180

agtatcttcc cattgaaggt ttagccgcgt ttaacaaagc aacagcagag ctattgcttg 240
gagctga 247

<210> 380
<211> 293
<212> DNA
<213> Zea mays

<400> 380

caaggctgaa aatcttatgt tggagaaagg agaaaacaaa gagtatcttc ccattgaagg 60
ttagccgcgt tttaacaaag caacagcaga gctattgctt ggagctgata accctgttat 120
taatcaagga ctggttgcta cacttcagtc tctctcgggc actggatcac tgcgtctcgc 180
tgcagcattc atacaaagat actttcctga agctaaagtg ctgatatcgt cgctacctg 240
gggtaaccac aagaatatct tcaatgatgc ttagggacct tggtcagagt aca 293

<210> 381
<211> 281
<212> DNA
<213> Zea mays

<400> 381

ctcgagccgt gcagccatac gtgctcaatg tagtcaagaa ggctgaaaat cttagttgg 60
agaaaggaga aaacaaagag tatcttccca ttgaagggtt agccgcgttt aacaaagcaa 120
cagcagagct attgcttgga gctgataacc ctgttattaa tcaaggactg gttgctacac 180
ttcagtctct ctcgggcact ggatcacagc gtctcgtctg agcattcata caaagatact 240
ttcctgaagc taaagtgtg atatcgtcgc ctacctgggg t 281

<210> 382
<211> 262
<212> DNA
<213> Zea mays

<400> 382

gagaaaggag aaaacaaaga gtatcttccc attgaagggt tagccgcgtt taacaaagca 60
acagcagagc tattgcttgg agctgataac cctgttatta atcaaggact ggttgctaca 120
cttcagtctc tctcgggcac tggatcactg cgtctcgtg cagcattcat acaaagatac 180

tttctgaag ctaaagtgt gatatcgctg cctacctggg gtaaccacaa gaatatcttc 240
aatgtgctag ggtacttggt ca 262

<210> 383
<211> 278
<212> DNA
<213> Zea mays

<400> 383

tggattttga gggaatgata gctgacattg aggctgctcc tgaaggtgt tttgttctgc 60
tacatgggtg tgatcacaa ccaactggaa tagaccaaac tctgaacag tgggagaaaa 120
ttgcagatgt cattcaagag aaaaagcata tgccattctt tgatgttgca tatcagggtt 180
aggctcagtg aagccttgat gaagatgcat tttctgtcag gctttttgtt agcgtagcat 240
ggaagtgttt gttgcacaat cttacagcaa gaacttgg 278

<210> 384
<211> 180
<212> DNA
<213> Zea mays

<400> 384

cggattttga gggaatgata gctgacattg aggctgctcc tgaaggttct tttgttctgc 60
tacatgggtg tgctcacaa ccaactggaa tagaccaaac tctgaacag tgggagaaaa 120
ttgcagatgt cattcaggag aaaaagcata tgccattctt tgatgttgca tatcagggtt 180

<210> 385
<211> 210
<212> DNA
<213> Zea mays

<400> 385

catggttgtg ctcaaaccc aactggaata gacccaactc ctgaacatgg gagaaaattg 60
cagatgtcat tcaagagaaa aagcatatgc cattcttgga tgttgcatat cagggttttg 120
ccagtggaag ccttgatgaa gatgcatttt ctgtcaggct tttgttaag cgtggcatgg 180
aagtgtttgt tgcacaatct tacagcaaga 210

<210> 386

<211> 292
 <212> DNA
 <213> Zea mays

<400> 386

gtgctcataa tcccaccggt gtagatccta cggaggaaca atggagagaa atatcccatc 60
 agttcaaggt gaaaaaacat tttccattct ttgacatggc ataccaagggt tttgccagtgt 120
 gtgatccaga gagagatgcc aaggcaatcc gaattttcct tgaagatgga caccaaattg 180
 gatgtgctca gtcatacgca aagaacatgg gactttatgg acagagagca ggatgcctga 240
 gtattctgtg tgaggatgag atgcaagcag ttgctgtcaa gagccaactg ca 292

<210> 387
 <211> 290
 <212> DNA
 <213> Zea mays

<400> 387

ggcataccaa ggggttgcca gtggtgatcc agagagagat gccaaaggcaa tccgaatttt 60
 ccttgaagat ggacaccaa ttggatgtgc tcagtcatac gcaaagaaca tgggacttta 120
 tggacaaaga gcaggatgcc tgagtatttt gtgtgaggat gagatgcaag cagttgctgt 180
 caagagccaa atgcaacaga tcgcaagacc aatgtacagc aaccacactg ttcattggtgc 240
 actggttgtc tctataatcc tcagtgatcc agaattgaag agttgtggtt 290

<210> 388
 <211> 281
 <212> DNA
 <213> Zea mays

<400> 388

cttcattctt ttagcttcat gtatatagat ctaaacttag aggtgtagat cctacggacg 60
 aacaatggag agatatatcc catcagttca aggtgaaaaa acattttcca ttctttgaca 120
 tggcatacca agggtttgcc agtggatgatc cagagagaga tgccaaggca atccgaattt 180
 tccttgaaga tggacaccaa attggatgtg ctcaatcata cgcaaagaac atgggacttt 240
 atggacaaag agcaggatgc ttgagtattt tgtgtgaaga t 281

<210> 389

<211> 175
<212> DNA
<213> Zea mays

<400> 389

gttcattctt tttgcttcat gcatgtgctc ataatcccac cgggtgtagat cctacggagg 60
aacaatggag agaaatatcc catcagttca aggtgaaaaa acattttcca ttctttgaca 120
tggcatacca agggtttgcc agtggtgatc cagagagaga tgccaaggca atccg 175

<210> 390
<211> 136
<212> DNA
<213> Zea mays

<400> 390

aaaacatddd ccattctttg acatggcata ccaaggggtt gccagtgggtg atccagagag 60
agatgccaaag gcaatccgaa ttttccttga agatggacac caaattggat gtgctcagtc 120
atacgcaaag aacatg 136

<210> 391
<211> 181
<212> DNA
<213> Zea mays

<400> 391

gttcattctt tttgcttcat gcatgtgctc ataatcccac cgggtgtagat cctacggagg 60
aacaatggag agaaatatcc catcagttca aggtgaaaaa acattttcca ttctttgaca 120
tggcatacca agggtttgcc agtggtgatc cagagagaga tgccaaggca atccgaattt 180
c 181

<210> 392
<211> 177
<212> DNA
<213> Zea mays

<400> 392

gttcatactt tttgcttcat gcatgtgctc ataatcccac cgggtgtaaaa ctacggagaa 60
caatggagag aaatatcaca tcagttcaag gtgaaaaaac attttccata ctttgacatg 120

gcataccaag ggtttgccag tggatgatcca gagagagatg ccaaggcgat ccgaatt 177

<210> 393
<211> 259
<212> DNA
<213> Zea mays

<400> 393

gtcaactgtc cctaggacag atattatattt cttttgttca cccaacaatc ctactggtgc 60
tgctgcatct cgggaccaac taaccaaatt agtaaaattt gcaaaggaca acgggtccat 120
catagtctat gattctgctt atgcaatgta catatcagat gacagcccaa agtctatctt 180
tgaaattcct ggagcaaagg aggttgctat tgagacagcc tcattctcga agtacgctgg 240
gttcacaggt gtccgtcta 259

<210> 394
<211> 343
<212> DNA
<213> Zea mays

<400> 394

tgacagccca aagtctatct ttgaaattcc tggagcaaag gaggttgcta ttgagacagc 60
ctcattctcg aagtacgctg ggttcacagg tgtccgtcta ggttggactg ttgtcgccaa 120
ggagctcctt ttctcgatg gacatccagt tgctaaagat ttcaatcgca tagtttgcac 180
ttgcttcaat gggcatcaaa cattgcgcaa ctggtgggtt agcctgcctc tctccagacg 240
gtctaaaggc tatgcaagat gttgttggct tctacaagga gaacactgaa ataatcgttg 300
agacatttac atcactcgga ttcgacgtct atggcgcaaa gac 343

<210> 395
<211> 171
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<400> 395

ccaaagtcta tctttgacat tcctggagca aaggagggtt ctattgagac agcctcattc 60
tcgaaatacg ctgggttcac aggtgtccgt ctaggttgga ctgttgtccc caaggagctc 120
cttttctcgg atggacatcc agttgotana gatttcaatc gcatagtttg c 171

<210> 396
 <211> 256
 <212> DNA
 <213> Zea mays

<400> 396

ctgacttata tcagcaagac gttcagaagt atggaaacat tgagtacatg agatgcggtc 60
 cagaaaatgg attttttcct gatctgtcaa ctgtccctag gacagatatt attttctttt 120
 gttcacccaa caatcctact ggtgctgctg catctcgga ccaactaacc aaattagtaa 180
 aatttgcaaa ggacaatggg tccatcatag tctgtgattc tgcttatgca atgtacatat 240
 agatgacagc ccaaag 256

<210> 397
 <211> 299
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <400> 397

gctccttcag gttcaattgt actgctgnca tgcctgtgct cacaacccta ctggagtaga 60
 tcctaccatc gaacagtggg aacagattag gcagctgatg agatcaaaat cactgcttcc 120
 gttctttgac agtgcctatc aaggctttgc aagtggaggt cttgacaaag atgctcagtc 180
 agtgcgtatg tttgttgctg atgggtgtga acttctcatg gctcagagct acgctaagaa 240
 catgggattg tatggagagc gtgttggcgc tttgagcatt gtatgtaaag tgccgatgt 299

<210> 398
 <211> 297
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <400> 398

aagaacttct catgggctca gagctacgt aagaacatgg gattgtatgg agagcgtgtt 60
 ggcgctttga gcattgtatg taaaagtgcc gatgtagctg ttagggttga aagtcaactc 120
 aaacttgtca tcaggcctat gtattcaaac cctcctcttc atgggtgcctc tatcgttgct 180
 accatactca gggacagcga gatgttcaac gaatggactc tggaactgaa ggccatggct 240

gatangatca ttaacatgag gcaacaacta tttaatgcgc tgaaatccag aggaacc 297

<210> 399
<211> 279
<212> DNA
<213> Zea mays

<400> 399

gtatgtttgt tgctgatggg ggtgaacttc tcatggctca gagctacgct aagaacatgg 60

gattgtatgg agagcgtggt ggcgctttga gcattgtatg taaaagtgcc gatgtagctg 120

ttagggttga aagtcaactc aaacttgtca tcaggcctat gtattcaaac cctcctcttc 180

atgggtgcctc tatcgttgct accatactca gggacagcga gatgttcaac gaatggactc 240

tggaactgaa ggccatggct gataggatca ttaacatgg 279

<210> 400
<211> 269
<212> DNA
<213> Zea mays

<400> 400

gctttgcaag tggaagtctt gacaaagatg ctcatgcagt gcgtatgttt gttgctgatg 60

gtgggtgaact tctcatggct cagagctacg ctaagaacat gggattgtat ggagagcgtg 120

ttggcgcttt gagcattgta tgtaaaagtg ccgatgtagc tgtttaggggtt gaaagtcaac 180

tcaaacttgt catcaggcct atgtattcaa accctcctct tcatgggtgcc tctatcgttg 240

ctaccatact cagggacagc gagatgttc 269

<210> 401
<211> 318
<212> DNA
<213> Zea mays

<223> unsure at all n locations

<400> 401

gtttgttgct gatgggtggg aacttctcat ggctcagagc tacgctaaga acatgggatt 60

gtatggagag cgtgttggcg ctttgagcat tgtatgtaaa agtgccgatg tagctgttag 120

ggttgaaagt caactcaaac ttgtcatcag gcctatgtat tcaaaccctc ctcttcatgg 180

tgctctatc gttgctacca tactcagga cagcgagatg ttcaacgaat ggactctgga 240
 actgaaggcc atggctgata ggatcataac atgaggcaac aatatttaat gcgctgaaat 300
 ccagangaac ccctggtg 318

<210> 402
 <211> 282
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <400> 402

tttgganac acccaaaagt cttcacccta tctggcttga acgtaggtg ctaccgctat 60
 tatgatcctg caacatgcag cttcacttc gaaggactcc tggaagacct cggttctgct 120
 cttcaggtt caattgtact gctgcatgcc tgtgctcaca accctactgg agtagatcct 180
 accatcgaac agtgggaaca gattaggcag ctgatgagat caaaatcact gcttccgttc 240
 tttgacagt cctatcaagg ctttgcaagt ggaagtcttg ac 282

<210> 403
 <211> 260
 <212> DNA
 <213> Zea mays

<400> 403

gttgctgatg gtgggtgaact tctcatggct cagagctacg ctaagaacat gggattgtat 60
 ggagagcgtg ttggcgcttt gagcattgta tgtaaaagtg ccgatgtagc tgtaggggtt 120
 gaaagtcaac tcaaacttgt catcaggcct atgtattcaa accctcctct tcatggtgcc 180
 tctatcgttg ctaccatact cagggacagc gagatgttca acgaatggac tctggaactg 240
 aaggccatgg ctgataggat 260

<210> 404
 <211> 302
 <212> DNA
 <213> Zea mays

<400> 404

gggttgctac cgtgcagtgc ctatcgggta ctggttcttt aagagtcgga ggtgaatttc 60
 ttgcaaggca ctatcacgag cgcactatct acatcccaca accaactgg ggaaatcacc 120

caaaagtctt caccctatct ggcttgaacg ttaggagatg aacgctatta tgatcctgca 180
 acatgcagcc ttcacttcga aggactcctg gaagacctcg gttctgctcc ttcagggttca 240
 attgtactgc tgcattgctg tgctcacaac cctactggag tagatcctac catcgaacag 300
 tg 302

<210> 405
 <211> 280
 <212> DNA
 <213> Zea mays
 <223> unsure at all n locations
 <400> 405

cgaacttctc atggctcaga gctacgctaa gancatggga ttgtatggng agcgtgttgg 60
 cgctttgagc attgtatgtn aaagtgccga tgtagctgtt aggggttgana gtcaactcaa 120
 acttgtcatc aggcctatgt attcaaacc cctcttcat ggtgcctcta tcgttgctac 180
 catactcagg gacagcgaga tgttcaacga atggactctg gaactgaagg ccatggctga 240
 taggntctta acatgaggca acaactatct aatgogctga 280

<210> 406
 <211> 264
 <212> DNA
 <213> Zea mays
 <400> 406

acttctcatg gctcagagct acgctaagaa catgggattg tatggagagc gtgttggcgc 60
 tttgagcatt gtatgtaaaa gtgccgatgt agctgttagg gttgaaagtc aactcaaact 120
 tgtcatcagg ccatgtattc aaaccctcct cttcatggtg cctctatcgt tgctaccata 180
 ctcagggaca gcgagatggt caacgaatgg actctggaac tgaaggccat ggctgatagg 240
 atcattaaca tgaggcaaca actt 264

<210> 407
 <211> 252
 <212> DNA
 <213> Zea mays
 <400> 407

caggacagcg agatgttcaa cgaatggact ctggaactga aggccatggc tgataggatc 60
 attaacatga ggcaacaact atttaatgcg ctgaaatcca gaggaacccc tgggtgattgg 120
 agccatatca ttaagcaaat tgggatgttt actttcactg ggctgaatag cgaacaagtc 180
 gcattcatga ggcaggaata ccacatttat atgacatctg atgggaggat cagcatggcc 240
 ggtttgagca tg 252

<210> 408
 <211> 254
 <212> DNA
 <213> Zea mays

<400> 408

taagatgttc aacgaatgga ctctggaact gaaggccatg gctgatagga tcattaacat 60
 gaggaacaa ctatttaatg cgctgaaatc cagaggaacc cctgggtgatt ggagccatat 120
 cattaagcaa attgggatgt ttactttcac tgggctgaat agcgaacaag tcgcattcat 180
 gaggcaggaa taccacattt atatgacatc tgatgggagg atcagcatgg ccggtttgag 240
 catgaggact gtgc 254

<210> 409
 <211> 254
 <212> DNA
 <213> Zea mays

<400> 409

gtaaaagtgc cgatgtagct gttagggttg aaagtcaact caaacttgtc atcaggccta 60
 tgtattcaaa ccctcctctt catggtgcct ctatcgttgc taccatactc agggacagcg 120
 agatgttcaa cgaatggact ctggaactga aggccatggc tgataggatc attaacatga 180
 ggcaacaact atttaatgcg ctgaaatcca gaggaacccc tgggtgattgg agccatatca 240
 ttaagcaaat tggg 254

<210> 410
 <211> 255
 <212> DNA
 <213> Zea mays

<400> 410

ctgttagggg tgaaagtcaa ctcaaacttg tcatcaggcc tatgtattca aaccctcctc 60
 ttcatgggtgc ctctatcggt gctaccatac tcagggacag cgagatgttc aacgaatgga 120
 ctctggaact gaaggccatg gctgatagga tcattaacat gaggcaacaa ctatttaatg 180
 cgctgaaatc cagaggaacc cctgggtgatt ggagccatat cattaagcaa attgggatgt 240
 ttactttcac tgggc 255

<210> 411
 <211> 235
 <212> DNA
 <213> Zea mays

<400> 411

gattaggcag ctgatgagat caaaatcact gcttcogttc tttgacagtg cctatcaagg 60
 ctttgcaagt ggaagtcttg acaaagatgc tcagtcagtgc cgtatgtttg ttgctgatgg 120
 tgggtgaactt ctcatggctc agagctacgc taagaacatg ggattgtatg gagagcgtgt 180
 tggcgctttg agcattgtat gtaaaagtgc cgatgtagct gttaggggtg aaagt 235

<210> 412
 <211> 272
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <400> 412

acttctcatg gctcagagct acgctaagaa catgggattg tatggagagc gtgttggcgc 60
 tttgagcatt gtatgtaaaa gtgcgatnt agctgttagg gttgaaagtc aactcaaact 120
 tgtcancagg cctatgtatt caaaccctcc tcttcatggg gcctctatcg ttgctaccat 180
 annncaggac agcgagatgt tcaacgaatg gactctggaa tgaaggccat ggctgatagg 240
 atcataacat gaggcaacaa ctattaatgc gc 272

<210> 413
 <211> 243
 <212> DNA
 <213> Zea mays

<400> 413

caggcctatg tattcaaacc ctctctttca tgggtgcctct atcgttgcta ccatactcag 60

ggacagcgag atgttcaacg aatggactct ggaactgaag gccatggctg ataggatcat 120
 taacatgagg caacaactat ttaatgcgct gaaatccaga ggaaccctg gtgattggag 180
 ccataatcatt aagcaaattg ggatgtttac tttcactggg ctgaatagcg aacaagtcgc 240
 att 243

<210> 414
 <211> 241
 <212> DNA
 <213> Zea mays
 <400> 414

gtcttgacaa agatgctcag tcagtgcgta tgtttggtgc tgatgggtgt gaacttctca 60
 tggctcagag ctacgctaag aacatgggat tgtatggaga gcgtgttggc gctttgagca 120
 ttgtatgtaa aagtgccgat gtagctgtta gggttgaaag tcaactcaaa cttgtcatca 180
 ggcctatgta ttcaaaccct cctcttcatg gtgcctctat cgttgctacc atactcaggg 240
 a 241

<210> 415
 <211> 254
 <212> DNA
 <213> Zea mays
 <400> 415

tgagaagttc accaccatca gcaacaaaca tacgcactga ctgagcatct ttgtcaagac 60
 ttccacttgc aaagccttga taggcactgt caaagaacgg aagcagtgat tttgatctca 120
 tcagctgcct aatctgttcc cactgttoga tggtaggata tactccagta gggttgtgag 180
 cacaggcatg cagcagtaca attgaacctg aaggagcaga accgaggtct tccaggagtc 240
 cttcgaagtg aagg 254

<210> 416
 <211> 221
 <212> DNA
 <213> Zea mays
 <400> 416

gattaggcag ctgatgagat caaaatcact gcttccgttc tttgacagtg cctatcaagg 60

ctttgcaagt ggaagtcttg acaaagatgc tcagtcagtg cgtatgtttg ttgctgatgg 120
 tgggtgaactt ctcatggctc agagctacgc taagaacatg ggattgtatg gagagcgtgt 180
 tggcgctttg agcattgtat gtaaaagtgc cgatgtagct g 221

<210> 417
 <211> 328
 <212> DNA
 <213> Zea mays

<400> 417

ctagttctag atcgccagcc gccgctcggg ccgctcgatc tagaactagc ccacgcgtcc 60
 gcggacgcgt ggcacgagcg cactatctac atcccacaac caatcctggg gaaatcaccc 120
 aaaagtcttc acactatctg gcttgaacgt taggagctac cgctattatg atcctgcaac 180
 atgcagcctt cacttcgaag gactcctgga acacctcggg tctgctcctt caggttcaat 240
 tgtactgctg catgcctgtg ctcaacaacc tactggagta gatcctacca tcgaacagtg 300
 ggaacagatt aggcagctga tgagatca 328

<210> 418
 <211> 272
 <212> DNA
 <213> Zea mays

<400> 418

atatcattaa gcaaattggg atgtttactt tcaactgggct gaatagcgaa caagtcgcat 60
 tcatgaggca ggaataccac atttatatga catctgatgg gaggatcagc atggccggtt 120
 tgagcatgag gactgtgccc catcttgagc atgccatata cgctgcagtt actcaactga 180
 aatgaggata gtatcgagc tttcgtgaat aaaacctgaa tcaccacaaa caatgttcta 240
 agtactcagc cagtgggtatc tactggttga cc 272

<210> 419
 <211> 249
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <400> 419

cggaacgctg gttntaatgc gctgaaatcc agaggaaccc ctggtgattg gagccatata 60
aanaagcaaa ttgggatgtt tacttttact gggctgaata gcgaacaagt cgcattcatg 120
aggcaggaat accacattta tatgacatct gatgggagga tcagcatggc cggtttgagc 180
atgaggactg tgcccatct tgcagatgcc atacacgctg cagttactca actgaaatga 240
ggatagtat 249

<210> 420
<211> 224
<212> DNA
<213> Zea mays

<400> 420

gcgagatgtt caacgaatgg actctggaac tgaaggccat ggctgatagg atcattaaca 60
tgaggcaaca actatttaat gcgctgaaat ccagaggaac ccctggtgat tggagccata 120
tcattaagca aattggatgt ttactttcac tgggctgaat agcgaacaag tcgcattcat 180
gaggcaggaa taccacattt atatgacatc tgatgggagg atca 224

<210> 421
<211> 234
<212> DNA
<213> Zea mays

<400> 421

atccagagga acccctggtg attggagcca tatcattaag caaattggga tgtttacttt 60
cactgggctg aatagcgaac aagtcgcatt catgaggcag gaataccaca tttatatgac 120
atctgatggg aggatcagca tggccggttt gagcatgagg actgtgcccc atcttgaga 180
tgccatacac gctgcagtta ctcaactgac atgaggctag tatcgagct ttcg 234

<210> 422
<211> 280
<212> DNA
<213> Zea mays

<400> 422

gggttgctac cgtgcagtgc ctatcgggta ctggttcttt aagagtcgga ggtgaatttc 60
ttgcaaggca ctatcacgag cgcactatct acatcccaca accaacctgg ggaaatcacc 120

caaaagtctt caccctatct ggcttgaacg ttaggagcta ccgctattat gatcctgcaa 180
 catgcagcct tcacttcgaa ggactcctgg aaagactcgg ttctgctact tcagggttcat 240
 tgtactgctg catgcctgtg ctcacaacct actggagtag 280

<210> 423
 <211> 278
 <212> DNA
 <213> Zea mays

<400> 423

gtgaaatcca gaggaacccc tgggtgattgg agccatatca ttaagcgaat tgggatgttt 60
 acttttactg ggctgaatag cgaacaagtc gcattcatga ggcaggaata ccacatttat 120
 atgacatctg atgggaggat cagcatggcc ggtttgagca tgaggactgt gccccatctt 180
 gcagatgcca tacacgctgc agttactcaa ctgaaatgag gatagtatcg cagctttcgt 240
 gaataaaacc tgaatcacc cacaacaatgt tctaagta 278

<210> 424
 <211> 229
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <400> 424

ggaggtgaat ttcttgcaag gcactatcac gagegcacta tctacatccc acaaccaacc 60
 tggggaaatc acccaaaagt cttcaccta tctggcttga acgttaggng ctaccgctat 120
 tatgatcctg caacatgcag ctttcaactt gaaggactcc tggaagacct cggttctgct 180
 ctttcaggtt caattgtact gctgcatgcc tgtgctcaca accctactg 229

<210> 425
 <211> 268
 <212> DNA
 <213> Zea mays

<400> 425

aagtcgcatt catgaggcag gaataccact ttatatgaca tctgatggga ggatcagcat 60
 ggccggtttg agcatgagga ctgtgcccc tcttgcatgat gccatacacg ctgcagttac 120
 tcaactgaaa tgaggatagt atcgcagctt tcgtgaataa aacctgaatc acccacaaca 180

atgttctaag tactcagcca gtggtattta ctggttgacc tactgtagtt tgcgtcggaa 240
tagatatgtt tttttactct tcgtgggg 268

<210> 426
<211> 279
<212> DNA
<213> Zea mays

<400> 426

ccccctggtga ttggagccat atcattaagc aaattgggat gtttactttc actgggctga 60
atagcgaaca agtcgcattc atgaggcagg aataccacat ttatatgaca tctgatggga 120
ggatcagcat ggccggtttg agcatgagga ctgtgccccca tcttgcatg gccatacacg 180
ctgcagttac tcaactgaaa tgaggatagt atcgcagctt tcgtgaataa aacctgaatc 240
accacaaca atgttctaag tactcagcca gtggtattt 279

<210> 427
<211> 209
<212> DNA
<213> Zea mays

<400> 427

gtcttgacaa agatgctcag tcagtgcgta tgtttgttgc tgatgggtggt gaacttctca 60
tggctcagag ctacgctaag aacatgggat tgtatggaga gcgtgttggc gctttgagca 120
ttgtatgtaa aatgccgatg tagctgttag ggttgaaagt caactcaaac ttgtcatcag 180
gcctatgtat tcaaaccctc ctcttcatg 209

<210> 428
<211> 270
<212> DNA
<213> Zea mays

<400> 428

agcaaattgg gatgtttact ttactgggc tgaatagcga acaagtcgca ttcatgaggc 60
aggaatacca catttatatg acatctgatg ggaggatcag catggccggt ttgagcatga 120
ggactgtgcc ccatcttgca gatgccatac acgctgcagt tactcaactg aaatgaggat 180
agtatcgcag ctttcgtgaa taaaacctga atcaccaca acaatgttct aagtactcag 240

ccagtgggtat tactgggttga cctactgtag

270

<210> 429
<211> 187
<212> DNA
<213> Zea mays

<400> 429

ctgaaatcca gaggaacccc tgggtgattgg agccatatca ttaagcaaat tgggatgttt 60
actttcactg ggctgaatag cgaacaagtc gcattcaatg aggcaggaat aaccacattt 120
atatgacatc tgatgggagg atcagcatgg cgggtttgag catgaggact gtgccccatc 180
ttcaaga 187

<210> 430
<211> 214
<212> DNA
<213> Zea mays

<400> 430

ttgggatgtt tactttcact gggctgaata gcgaacaagt cgcattcatg aggcaggaat 60
accacattta tatgacatct gatgggagga tcagcatggc cgggtttgagc atgaggactg 120
tgccccatct tgcagatgcc atacacgctg cagttactca actgacatga ggctagtatc 180
gcagctttcg tgaataaaac ctgaatcacc caca 214

<210> 431
<211> 188
<212> DNA
<213> Zea mays

<400> 431

tgtagctgtt aggattgaaa gtcaactcaa acttgtcatc aggcctatgt attcaaacc 60
acctcatcat ggtgcctcta tcgtagctac catactcagc gacagcgaga tgttcaacga 120
atggacactg gaacagaagg ccatggctga taggatcatt aacatgaggc aacaactatt 180
taatgcgc 188

<210> 432
<211> 256

<212> DNA
<213> Zea mays

<400> 432

ctgaaatcca gaggaacccc ggtgattgga gccatatcat taagcaaatt gggatgttta 60
ctttcactgg gctgaatagc gaacaagtcg cattcatgag gcaggaatac cacatttata 120
tgacatctga tgggaggatc agcatggccg gtttgagcat gaggactgtg ccccatcttg 180
cagatgccat acacgtcgca gttactcaac tgaaatgagg atagtatcgc agctttcgtg 240
aataaacctg aatcac 256

<210> 433
<211> 263
<212> DNA
<213> Zea mays

<400> 433

tgagccatat cattaagcaa attgggatgt ttactttcac tgggctgaat agcgaacaag 60
tcgcattcat gaggcaggaa taccacattt atatgacatc tgatgggagg atcagcatgg 120
ccggtttgag catgaggact gtgacccatc ttgcagatgc catacacgct gcagttactc 180
aactgaaatg aggatagtat cgcagctttc gtgaataaaa cctgaatcac ccacaacaat 240
gttctaagta ctcagccagt ggt 263

<210> 434
<211> 241
<212> DNA
<213> Zea mays

<400> 434

atgacatctg atgggaggat cagcatggcc ggtttgagca tgaggactgt gcccacatctt 60
gcagatgcca tacacgctgc agttactcaa ctgaaatgag gatagtatcg cagctttcgt 120
gaataaaacc tgaatcacc acaacaatgt tctaagtact caaccagtgg tatttactgg 180
ttgacctact gtagtttgcg tcggaataga tatgtttttt tactcttcgt ggggcagttt 240
t 241

<210> 435
<211> 162

<212> DNA
<213> Zea mays

<400> 435

gtcaactcaa acttgtcatc aggcctatgt attcaaacc tctcttcat ggtgcctcta 60
tcgttgctac catactcagg gacagcgaga tgttcaacga atggactctg gaactgaagg 120
ccatggctga taggatcatt aacatgaggc aacaactatt ta 162

<210> 436
<211> 151
<212> DNA
<213> Zea mays

<400> 436

ctcgagcgcg ctgaaatcca gaggaacccc tggtgattgg agccatatca ttaagcatat 60
tgggatgttt actttcactg ggctgaatag cgaacaagtc gcattcatga ggcaggaata 120
ccacatttat atgacatctg atgggaggat c 151

<210> 437
<211> 276
<212> DNA
<213> Zea mays

<400> 437

tgccggtttg agcatgagga ctgtgcccc tcttgcagat gccatacacg ctgcagttac 60
tcaactgaaa tgaggatagt atcgcagctt tcgtgaataa aacctgaatc acccacaaca 120
atgttctaag tactcagcca gtggtattta ctggttgacc tactgtagtt tgcgtcggaa 180
tagatatgtt tttttactct tcgtggggca gttttgtact ggtggattca taaggactct 240
gattatggtg cgttcggaac ttataataat aagcac 276

<210> 438
<211> 112
<212> DNA
<213> Zea mays

<400> 438

ctgagatcaa aatcactgct tccgttcttt gacagtgcct atcaaggctt tgcaagtgga 60
agtcttgaca aagatgctca gtcagtgcgt atgtttgttg ctgatggtgg tg 112

<210> 439
 <211> 164
 <212> DNA
 <213> Zea mays

<400> 439

accacaaca atgttctaag tactcagcca gtggtattta ctggttgacc tactgtagtt 60
 tgcgtcggaa tagatatgtt tttttactct tcgtggggca gttttgtact ggtggattca 120
 taaggactct gattatggtg cgttcgggaac ttataataat aagc 164

<210> 440
 <211> 173
 <212> DNA
 <213> Zea mays

<400> 440

caatgttcta agtactcagc cagtgggtatt tactgggtga cctactgtag tttgcgtcgg 60
 aatagatatg tttttttact ctctgtgggg cagttttgta ctggtggatt cataaggact 120
 ctgattatgg tgcgttcgga acttataata ataagcacat gaaattttgc ttc 173

<210> 441
 <211> 173
 <212> DNA
 <213> Zea mays

<400> 441

caatgttcta agtactcagc cagtgggtatt tactgggtga cctactgtag tttgcgtcgg 60
 aatagatatg tttttttact ctctgtgggg cagttttgta ctggtggatt cataaggcct 120
 ctgattatgg tgcgttcgga acttataata ataagcacat gaaattttgc ttc 173

<210> 442
 <211> 429
 <212> DNA
 <213> Zea mays

<400> 442

atccgaattt tccttgaaga tggacaccaa attggatgtg ctcagtcata ccaaagaac 60
 atgggacttt atggacaaag agcaggatgc ctgagtattt tgtgtgagga tgagatgcaa 120

gcagttgctg tcaagagcca actgcaacag atcgcaagac caatgtacag caaccacct 180
gttcatggtg cactggttgt ttctataatc ctcaagtgatc cagaattgaa gagtttgtgg 240
ttaaaagaag tcaagggatg ggctgatcgt atcattggaa tgcggaaggc acttaaggaa 300
aatcttgaaa agctaggttc acctttgtca tgggatcata tcaactaatca gattggaatg 360
ttctgctaca gtgggatgac acctgaacaa gttgaccgtt taacaaatga ataccacatt 420
tacatgacc 429

<210> 443

<211> 325

<212> DNA

<213> Zea mays

<400> 443

tgcgaaactc ttcaattctg gatcactgaa gagctggagg cacttaagga aaatctggaa 60
gagctaggtt cacctttgtc atgtgatcat atcactaatc agattggaat gttctgctac 120
agtgggatga cacctgaaca agtttaccgt ttaacaaatg aataccagag ttacattacc 180
cgtaatggga ggataagctt tgctgggtgtt acgacaggat atgttgacta cctttcatat 240
gcaattcatg aggttaccaa accaaattga gttaggggtcc taccttcttt ggtcgatgga 300
agctgatgga atgagactgt taagc 325

<210> 444

<211> 279

<212> DNA

<213> Zea mays

<400> 444

cgaagagcca actgcaacag atcgcatgac caatgtacag caaccacct ggtcagtgtg 60
cactggttgt ttgtataatc ctcaagtgatc cagaattgaa gagtttgtgg ttaaaagaag 120
tcaagggatg ggctgatcgt atcattggaa tgcgtaattc acttaaggat aaatcttaat 180
agctaggttc acctttgtta tggatcata tatttaatta ttattgtatt gttctttttt 240
tgttttattt attttttttt tttttttttt ttttttttt 279

<210> 445

<211> 355

<212> DNA
 <213> Zea mays
 <223> unsure at all n locations
 <400> 445

gccagctgaa acgattggca cgtcccatgt ntctgaaccc ccctattcac ggtgccaaga 60
 nggttggnaa cnttggtggt gatgcaacca ntgtttggtt aaatggaaac angagttggg 120
 tctaattngct tgancgantic naagatngta ananaaaann ttaaaaacag gttntttttc 180
 aaaggncaaa aaccgcaaga actgggnttt tatttinnagg ggntattgna atgttttttt 240
 anacggnttt aaaaaaannc antgggnaac attgcggnntn anntggatnt tatttgacaa 300
 angnnngggg gatttgnaaa natgggggnt cctgggttaa cggggatatt tttgc 355

<210> 446
 <211> 442
 <212> DNA
 <213> Zea mays
 <400> 446

cggacgcgtg ggatgagatg caagcagttg ctgtcaagag ccaactgcaa cagatcgcaa 60
 gaccaatgta cagcaaccca cctgttcatg gtgcactggt tgtttctata atcctcagtg 120
 atccagaatt gaagagtttg tgggttaaag aagtcaaggg tatggctgat cgtatcattg 180
 gaatgcggaa ggcacttaag gaaaatcttg aaaagctagg ttcaccttg tcatgggatac 240
 atatcactaa tcagattgga atgttctgct acagtgggat gacacctgaa caagttgacc 300
 gttaacaaa tgaataccac atttacatga ccgcgaatgg gtggataagc atggctgggtg 360
 ttacgacagg aaatgttggt tacctagcaa attcttttca tgaggttacc aaactcaatt 420
 tagttatggt cctaccttct tt 442

<210> 447
 <211> 471
 <212> DNA
 <213> Zea mays
 <223> unsure at all n locations
 <400> 447

gctagcagcc gctcctcgt caggcctttt ttntttcacc ctgcctaaac ccgcctcctn 60
 nggtccgaac tccgtctgct tcattctgagc gtccgggagg aaaaaacacg cggcgaggac 120

caggatggcg attgtgcggg aggaggcaag tggacacgtc catcagccca aggggtgagcg 180
cgctgcggcc gtccaaaacc atggccatca ccgatnaggc catggcgctg cggcaggccg 240
gcgtgccggt tatcggtcta gccgcggggg agccagactt ncgacacgcn ccccgtgatc 300
gnggangccc ggattgatgc aattaggaat gggtatacaa agatacactt ntaatgctgg 360
gacttttgaa ctgangaang ggtatttnta ctaaaacttn angaggagaa cgggggnttc 420
taacttccaa atnaaggctt tngtaacaan ggaactaaaa antnnntan a 471

<210> 448
<211> 433
<212> DNA
<213> Zea mays

<400> 448

caaaagccca cagcttcttc tccctactcc tccagtcctc cgtcatccgt ttcggtcgct 60
gccgcgcca ccgcacaaga agctagctcc tgctgtacc gcccgcctcat ggcgatgcta 120
tcccgcgcag cctcctccgc ggcccggcgc ccgctgctgc cgcgcctag gcttctggcg 180
gtgagggcga tggcgctgct gctcttcggc cactgcgagc cggcgcccaa ggaccccatc 240
ctcggcgta ccgaggcttt cctcgccgac ccctcgctccg acaaagtga cgtcggcgctc 300
ggcgctacc gggacgacaa cggccagccc gtcgtgctca gctgctgctg cgaggccgag 360
cgccgatcg cgggcaacct caacatggag taccttccga tgggaggcag cgtcaagatg 420
attgaagagt cac 433

<210> 449
<211> 237
<212> DNA
<213> Zea mays

<400> 449

cggacacgtg ggtctgccgc cgccaccgca caagaagcta gctcctgcct gtaccacccc 60
ggcatggcga tgctatcccg cgcagcctcc tccgcggccc ggcgcccgt gctgcccgcg 120
cctaggcttc tggcggtag ggcgatggcg tcgtcgctct tcggccacgt cgagccggcg 180
cccaaggacc ccctcctcgg cgtcaccgag gctttcctcg ccgacccctc gtccgac 237

<210> 450
 <211> 371
 <212> DNA
 <213> Zea mays

<400> 450

ccattctttg atgttgcata tcaaggtttt gccagtggaa gccttgatga agatgcattt 60
 tctgtcaggc tttttgttaa gcgtggcatg gaagtgtttg ttgcacaatc ttacagcaag 120
 aaccttggtc tatattctga aagggttggt gcgataaatg tcgtgtgctc agcaccagaa 180
 gttgcagata gggtaaagag ccagctgaaa cgattggcac gtcccatgta ctcgaacccc 240
 cctattcacg gtgccaagat agttgccaac gttgttggtg atccaatcat gtttggtgaa 300
 tggaaacaag agatggagct aatggctgga cggatcaaga atgtaagaca gaagctctac 360
 gacagtttgt c 371

<210> 451
 <211> 433
 <212> DNA
 <213> Zea mays

<400> 451

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 aagatggttg gcgaacgttg ttggtgatgc aaccatgttt ggtgaatgga aacaagagat 120
 ggagctaattg gctggactga tcaagaatgt aagacaaaag ctctacgaca gtttgtctgc 180
 caaggacaag agcggcaagg actggtcttt cattctgagg cagattggca tgttctccta 240
 caccggcttg aacaaagcgc agagtgacaa catgacggat aaatggcata ttacatgac 300
 caaggatggg cggatctcgt tagctgggct gtccctggct aagtgtgatt atcttgccga 360
 cgccatcatc gattccttcc ataatgtgaa ctatgctgaa gtactatagt tgaggggtcaa 420
 gctattgatg ttt 433

<210> 452
 <211> 362
 <212> DNA
 <213> Zea mays

<400> 452

accacgcgt ccgggaaaca agagatggag ctaatggctg gacggatcaa gaatgtaaga 60

cagaagctct acgacagttt gtctgccaag gacaagagcg gcaaggactg gtctttcatt 120
 ctgaggcaga ttggcatggt ctctacacc ggcttgaaca aagcgcagag tgacaacatg 180
 acggataaat ggcataatita catgaccaag gatgggcgga tctcgttagc tgggctgtcc 240
 ctggctaagt gtgattatct tgccgacgcc atcatcgatt ccttcataa tgtgaactag 300
 gctgaggtag gatagttgag ggtcaagcta ttgatgttta gttccgtgga cgctaggctg 360
 gg 362

<210> 453
 <211> 493
 <212> DNA
 <213> Zea mays
 <223> unsure at all n locations
 <400> 453

gtncgcagtt taggaacggt agcctgtcag tacgcgtcga aattccaagg tcccaccaag 60
 ccttcgtagg aaccaaaaaa tggaccaaata ggctggacgg ttaaaaaatg taagacagaa 120
 cctctacaac agtttgtctg ccaaggacaa aaccggcaag gactgggtctt tcattctgag 180
 gcagattggc atgttctcct acaccggctt gaacaaagcg cagagtgaca acatgacgga 240
 taaatggcat atttacatga ccaaggatgg gcggatctcg ttagctgggc tgtccctggc 300
 taagtgtgat tatcttgccg acgcatcat cgattccttc cataatgtga actaagctga 360
 ggtacgatag ttgaggggtca agctattgat gtttagttcc gtggacgcta ggctgggatt 420
 tttgggtcct tccagctata cagctcttcc cgttgtgctc aatctggtgt aacttggata 480
 aataaaatth tgt 493

<210> 454
 <211> 336
 <212> DNA
 <213> Zea mays
 <400> 454

cccgcctccg atccgctgct tactcgccac ccggagatgg ccaccgcgc cgccttctcc 60
 gtctcctcgc cggcggcctc cgccgtcgcc gcgcgatcca aggtgtttgg aggagttaag 120
 caggcgagaa ctagaactgg ctgccgcatc tgcacacgc ggaagaactt tggccgtgtc 180

atgatggccc ttgcagtgga tgtttctcgt tttgaaggac tgccaatggc tctccagac 240
ccaattcttg gggtttctga ggcctttaaa gcagagtaga gcgagctgac gctcaatctt 300
ggtgttggtg cctataggac agaggagctg cagcca 336

<210> 455
<211> 422
<212> DNA
<213> Zea mays

<400> 455

cgaaaagcta agcagagaga acaagcttac caaatcatca gtcattgtca ctgctgggtgc 60
aaatcaggct tttgtgaact tggctctcac tctttgtgat gctgggtgatt ccgttgatcat 120
gtttgcaccg tattatttca atgcctacat gtcattccag atgacagggtg ttactgacat 180
attagttggt ggctgcgac ccaagacact tcactctgat gttgattggt tggagaagggt 240
tctgaaagaa aatgagccta tccctaaact tgtcactggt gtgaatccgg ggaaccctg 300
tggagctttt atttcaaggc ctatgcttga gagaatttca gatctgtgca aaaatgctgg 360
tgcattgctt gtggttgaca atacctatga gtactttatg tatgatggaa tggagcacta 420
ct 422

<210> 456
<211> 389
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<400> 456

agacacctcc gccacctcca cctcgaatc gttccccacc atggcgctgc agggatcctc 60
cgtcttcgcc gcactcgagc aggccccgga ggaccccatc ctccgagtgga ccgttgcccta 120
caacaaggat ccagccccg tgaagggtcaa cctcgggggc ggcgcctacc ggaccgagga 180
agggaagccc ctagtgtgga acgtgggtcag gcgcgcccag caaatgttga tcaataatcc 240
gtcacgtgtc aaggagtacc taccaatcac cggctctggct gaattcaata agctgagcgc 300
taagcttatc tttggcgctg acagccctgc tattcaggag aatanggttg ctaccgtgca 360
gtgcctatcg ggtactgggtt ctttaagag 389

<210> 457
 <211> 382
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <400> 457

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 tcctccgtct tcgccgcact cgagcaggcc cggaggacc ccatactcgg agtgaccgtt 120
 gcctacaaca aggatcccag ccccgtagg gtcaacctcg gggtcggcgc ctaccggacc 180
 gaggaaggga agcccctagt gctgaacgtg gtcaggcgcg ccgagcaaatt gttgatcaat 240
 aatccgtcac gtgtcaagga gtacctacca atcaccggtc tggctgaatt caataagctg 300
 agcgctaagc ttatctttgg cgctgacagc cctgctattc aggagaatan ggttgctacc 360
 gtgcagtgcc tatcgggtac tg 382

<210> 458
 <211> 337
 <212> DNA
 <213> Zea mays
 <400> 458

ctcgaatcga tccccaccat ggcgtcgcag ggatactcgg tcttcgccgc actcgagcag 60
 gccccggagg accccatcct cggagtgacc gttgcctaca acaaggatcc cagccccgtg 120
 aaggtaacc tcggggtcgg cgcctaccgg accgaggaag ggaagcccct agtgctgaac 180
 gtggtcaggc gcgccgagca aatgttgatc aataatccgt cacgtgtcaa ggagtaccta 240
 ccaatcaccg gtctggctga attcaataag ctgagcgcta agcttatctt tggcgctgac 300
 agccctgcta ttcaggagaa tagggttgct accgtgc 337

<210> 459
 <211> 429
 <212> DNA
 <213> Zea mays
 <400> 459

gtccgacgtc ccaccggccc ccgtctcgt tttccccgc cggaacaagc acgctcaagc 60
 gctgcgcaac ggattggccc tgctaacgtt cgccccgggc aagggaag ccccaacgcc 120

caacgcaagg taagttagcc aattgggcaa ctggcggctt tctccccaag aaaaacaaca 180
agcaaaaaact tcggcaacct caaccctcga atcggtcccc accatggcgt cgcagggatc 240
ctccgtcttc gccgcaactg agcaggcccc ggaggacccc atcctcggag tgaccgttgc 300
ctacaacaag gatcccagcc ccgtgaaggt caacctcggg gtcggcgccct accggaccga 360
ggaagggaag cccctagtgc tgaacgtggt caggcgcgcc gagcaaagt tgatcaataa 420
tccgtcacg 429

<210> 460
<211> 411
<212> DNA
<213> Zea mays

<400> 460

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gcatcgagga cgtgctgagc gcggacgcgg cggcgcagaa cctgacggcg agcgaggcgg 120
cgcggcgagc gctggagtcg acgtcggcgg agctgcccg gcgcggaag ctggacgcca 180
aggaggagct ggagaagctg aacgaggccc cggcgctgat gacgctgttc gacttcatgg 240
gctggcactt cgaccaggac gagctgatga agcgcaggga ggacggcaca ctggacgcgg 300
acggggaggg catgctcctc aagaaggcgc ctagcatggc cccaagaag ttctcctacg 360
tcgacagcct ctctccggc ggcattgagga gcccctccgc ggcgcactga t 411

<210> 461
<211> 417
<212> DNA
<213> Zea mays

<400> 461

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tacagcgta tgtcccgcat cgaggacgtg ctgagcgcgg acgcggcggc acagaacctg 120
acggcgaccg aggcggcgcg gcgggtgctg gagtcggcgg acctgctcgc gccgcggaag 180
ctggacgcca aggaggagct ggagaagctg aacgaggccc cggcgctgat gacgctcttc 240
gacttcatgg gctggcactt cgaccaggac gagctgatga agcgcaggga ggacggcacg 300
ctggacgccg acggcgaggg catgctcctc aagaaggcgc ccagcgtggc gccaagaag 360

ttctcctacg togacagcct ctctctcggc ggcattgagga gcccctctgc gcgccac 417

<210> 462
 <211> 411
 <212> DNA
 <213> Zea mays

<400> 462

aacaaagcaa cagcagagct attgcttgga gctgataacc ctgttattaa tcaaggactg 60
 gttgctgcac ttcagtctct ctggggcact ggatcactgc gtctcgctgc agcattcata 120
 caaagatact ttctgaagc taaagtgctg atatcgctgc ctacctgggg taaccacaag 180
 aatatcttca atgatgctag ggtaccttgg tcagagtacc ggtattatga cccaagact 240
 gttgggttgg attttgaggg aatgatagct gacattgaag ctgctcctga aggttctttt 300
 gttctgctac atggttgtgc tcacaacca actggaatag acccaactcc tgaacagtgg 360
 gagaaaattg cagatgtcat tcaagagaaa aagcatatgc cattctttga t 411

<210> 463
 <211> 441
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <400> 463

tgagggtgga gagtgatttg aannttccca gtctcncagt cgcnatatct ctggaattac 60
 cttatcgacc caggcgctct aacaaagcaa catcagagct attgcttggg tctgattacc 120
 ctgttattaa tcaaggactg tgtgctgcac tacagtctct ctggggcact ggatcactgc 180
 gtctcgctgc agcattcata caaagatact ttctgaagc taaagtgctg atatcgctctc 240
 ctacctgggg taaccacaag aatatcttca atgatgctag ggtaccttgg tcagagtacc 300
 ggtattatga cccaagact gttgggttgg attttgaggg aatgatagct gacattgagg 360
 ctgctcctga acgttctttt gttcttctac atggtttgtt ctcaaaccc aactggaata 420
 gaccaactc cttaacattt t 441

<210> 464
 <211> 318
 <212> DNA
 <213> Zea mays

<400> 464

gttggtgcct ataggacaga agagctgcag ccatacgtgc tcaatgtagt caagaaggct 60
gaaaatctta tgttggagaa aggagaaaac aaagagtatc ttcccattga aggttttagcc 120
gcgtttaaca aagcaacagc agagctattg cttggagctg ataaccctgt tattaatcaa 180
ggactgggtg ctacacttca gtctctctcg ggactggat cactgcgtct cgctgcagca 240
ttcatacaaa gatactttcc tgaaactaaa gtgctgatat cgtcgcttac ctggggtaac 300
cacaagaata tcttcaat 318

<210> 465

<211> 427

<212> DNA

<213> Zea mays

<400> 465

cggacgcgtg ggcaagaatg ctccagatgg ttcattcttt ttgcttcatg catgtgctca 60
taatcccacc ggtgtagatc ctacggagga acaatggaga gaaatatccc atcagttcaa 120
ggtgaaaaaa cattttccat tctttgacat ggcataccaa gggtttgcca gtggtgatcc 180
agagagagat gccaaaggcaa tccgaatfff ccttgaagat ggacacccaaa ttggatgtgc 240
tcagtcatac gcaaagaaca tgggacttta tggacaaaga gcaggatgcc tgagtatfff 300
gtgtgaggat gagatgcaag cagttgctgt caagagccaa ctgcaacaga tcgcaagacc 360
aatgtacagc aaccacctg ttcattggtgc actggttggt tctataatcc tcagtgatcc 420
agaattg 427

<210> 466

<211> 434

<212> DNA

<213> Zea mays

<400> 466

ggcaaactga cttatatcag caagacgttc agaagtatgg aaacattgag tacatgagat 60
gcggtccaga aaatggatff tttcctgato tgtcaactgt ccctaggaca gatattatff 120
tcttttgttc acccaacaat cctactggtg ctgctgcato tcgggaccaa ctaaccaaaf 180
tagtaaaatt tgcaaaggac aacaggtcca tcatagtcta tgattctgct tatgcaatgt 240

acatatcaga tgacagccca aagtctatct ttgaaattcc tggagcaaag gaggttgcta 300
 ttgagacagc ctcatctctg aaatacgctg ggttcacagg tgtccgtcta ggttggactg 360
 ttgtcccca ggagctcctt ttctcggatg gacatccagt tgctaaagat ttcaatcgca 420
 tagtttgac ttgc 434

<210> 467
 <211> 497
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <400> 467

ggggggntaa agggggantt tattggaacc ccaattcccg ggtaccggtt ttatgatcct 60
 gcaacatgca gccttcactt cgaaggactc ctggaagacc tcggttctgc tccttnaggt 120
 tcaatngtac tgctgcatgc ctgtgctcac aaccctactg gagtagatcc taccatcgaa 180
 cagtgggaac agattaggca gctgatgaga tcaaaatcac tgcttccggt ctttgacagt 240
 gcctatcaag gctttgcaag tggaagtctt gacaaagatg ctcatgcagt gcgtatgttt 300
 gttgctgatg gtggtgaact tctcatggct cagagctacg ctaagaacat gggattgtat 360
 ggagagcgtg ttggcgcttt gagcattgna tgtaaaagtg ccgatgtagc tgttaggggt 420
 gaaagtcaac tcaaacttgn catcaggcct atgtattcaa accottctct tcatggngcc 480
 totatcgntg ctaccat 497

<210> 468
 <211> 386
 <212> DNA
 <213> Zea mays

<400> 468

ttatcatggc tcagagctac gctaagaaca tgggattgta tggagagcgt gttggcgctt 60
 tgagcattgt atgtaaaagt gccgatgtag ctgttagggg tgaaagtcaa ctcaaacttg 120
 tcatcaggcc tatgtattca aaccctctc ttcatgggtg ctctatcggt gctaccatac 180
 tcagggacag cgagatgttc aacgaatgga ctctggaact gaaggccatg gctgatagga 240
 tçattaacat gaggcaacaa ctatttaatg cgctgaaatc cagaggaacc cctggtgatt 300

ggagccatat cattaagcaa attgggatgt ttactttcac tggggcctga atagcgaaac 360
 aaagtcgccc cattcatgag gcagga 386

<210> 469
 <211> 405
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <400> 469

actccaata gtgagtcgta ttacagagct acgctaagaa catgggattg tatggagagc 60
 gtgttggcgc tttgagcatt gtatgtaaaa gtgccgatgt agctgttagg gttgaaagtc 120
 aactcaaact tgtcatcagg cctatgtatt caaacctcc tcttcatggt gcctctatcg 180
 ttgctaccat actcagggac agcgagatgt tcaacgaatg gactctggaa ctgaaggcca 240
 tggctgatag gatcattaac atgangcaac aactatttaa tgcgctgaaa tccangagga 300
 acccctggtg attggagcca tatcattaaa gcaaattggg atgtttacnt tccctggggn 360
 cngaaataan cgaagcnnng tcggccnntt cangagggna gggag 405

<210> 470
 <211> 396
 <212> DNA
 <213> Zea mays

<400> 470

cccacgcgtc cgcccacgcg tccggcgtgt tggcgcttcg agcattgtat gtaaaagtgg 60
 cgatgtagct gggaggggtg aaagtcaact caaacttgtc atcaggccta tgtattcaaa 120
 ccctcctata catggtgcct ctatcgggtgc taccatactc agggacagcc agatgttcaa 180
 cgaatggact ctggaactga aagccattgc tgataagatc attcacatga ggcattcaact 240
 atttaatgcc cctaaatcca aatgaacccc tggagattgg agccatatca ttgagcacat 300
 tcggatgtac actgtgactg agctgaataa cgaacaagtc gcattcatga ggcaggaata 360
 cctcatttac atgacatctg atgatatgaa catcat 396

<210> 471
 <211> 416
 <212> DNA
 <213> Zea mays

<400> 471

agttgctacc atactcaggg acagcgagat gttcaacgaa tggactctgg aactgaaggc 60
catggttgaa aggttaatat acataaggca acaccaatta atgccccgga atccaaaaga 120
aaccctggtg aatggagcca tatcaataag caaattggga tgtttacttt cactgggctg 180
aatagcgaac aagtcgcatt cacgaggcac gaataccaca tttatatgac atctgatggg 240
aagatcagca tggccggttt gagcatgagg actgtgcccc atcttgcaca tgccatacac 300
gctgcagtta ctcaactgaa atgaggatag tatcgcagct ttcgtgaata aaacctgaat 360
catccacaac aatgtttctaa gtactcatcc actggtatctt actggttgac ctactg 416

<210> 472

<211> 404

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<400> 472

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ttggcgcttt gagcattgta ngtaanagtg ccgatgtagc ngtnagggnt gaaagtcanc 120
tcaancttgt catcaggcnn atgtattcaa accctcctct tcatggtgcc tctancgttg 180
ctaccatnct cagggacagc gagatgttca ncgaatggac tctggaactg aaggccatgg 240
ctgataggat cattaacang aggcaacaac tatttaatgc gctgaaatcc agaggaaccc 300
ctggtgantg gagccatntc ngttaagnca aattgggatg tntactttca nngggggcct 360
naagtaagcg aaacagnntn cgnccctttcc cggngggcgg ggag 404

<210> 473

<211> 294

<212> DNA

<213> Zea mays

<400> 473

atacacgctg cagttactca actgaaatga ggatagtatc gcagctttcg tgaataaaac 60
ctgaatcacc cacaagaatg ttctaagtac tcagccagtg gtatttactg gttgacctac 120
tgtagtttgc gtcggaatag atatgttttt ttactcttcg tggggcagtt ttgtactggt 180

ggattcataa ggactctgat tatgggtgcgt tcggaactta taataataag cacatgaaat 240

tttgcttcaa aaaaaaacta tatcaccctc aatactacaa caacagtcag ccac 294

<210> 474

<211> 259

<212> DNA

<213> Zea mays

<400> 474

actgaaatga ggatagtatc gcagctttcg tgattaaaac ctgaatcacc cacagcggcg 60

ttctaagtac tcagccagtg gtattttactg gttgacctac tgtagtttgc gtcggaatag 120

atttggtttt ttactcttcg tggggcagtt ttgtactggt ggattcataa ggactctgat 180

tatgggtgcgt tcggaactta taataataag cacatgaaat tttgcttcaa aaaaatacta 240

ccattcaaac agataaaaa 259

<210> 475

<211> 262

<212> DNA

<213> Glycine max

<223> unsure at all n locations

<400> 475

ccaaagaggt tgccatcgag acttcatcat ttagcaagta tgctgggttc actggagtcc 60

gattgggttg gactgtgggt ccaaagcagt tgctgttttc tgatggattt cctgttgcca 120

aggacttcaa ccgtattgta tgcacttggt tcaatgggtgc atcaaataatt tcccaggcag 180

gtgggtctggc ttgcctttca ccagacgggc ttaaggctat gcgagatggt attggattct 240

acaaaganaa taccgacatt at 262

<210> 476

<211> 262

<212> DNA

<213> Glycine max

<400> 476

ctcgagccgc tgtcataccc acttccccct caagagcaca cgcccagatc agcgttaaca 60

acgtcttaca actgcgaaac aaaaccaatc tgaaatgtcc gaccaacaag agattttacgc 120

tgcgttcccc aacgtccctc aggtctctcc tgattccatc ttccaattga ccgctcggtta 180

cgtcgccgac aagcatccga acaagatcaa cctgggtgtc ggggcataca ggacggacga 240
 tgggaaacct tgggtcttgc cc 262

<210> 477
 <211> 271
 <212> DNA
 <213> Glycine max
 <400> 477

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 ggcacttgct tcaacatttt acagcgatct tggcatagaa gaggatgata tatttgcttc 120
 agatggagca aagtgtgata tatccgtctc cagattgtct ttgggtcaaa tgtaaaaatg 180
 gctgtgcaat acccttcata tccggcctat gtagactcta gtgtaattat gggccagact 240
 ggcctcttcc agaagaatgt tgagaagttt g 271

<210> 478
 <211> 256
 <212> DNA
 <213> Glycine max
 <400> 478

gttttgtgcc agagtataaa gcaagtagct gcactaaaaa gccaaactgca gctgatgtcc 60
 catgcaatgt atagcagcat tccttttcag ggtatttcac tagttactat gatattaagc 120
 gagccagata cagaagcact ttggagaaaa gagataaagg tcatggctaa acggattcaa 180
 actatgcgaa ctaccttgcg gcattgtctt gagaacttgc attcatcttt caattgggag 240
 cacataactg atcagg 256

<210> 479
 <211> 286
 <212> DNA
 <213> Glycine max
 <400> 479

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 actttcactg ggctgaatag cgaacaagtc gcattcatga ggcaggaata ccacatttat 120
 atgacatctg atgggaggat cagcatggcc ggtttgagca tgaggactgt gccccatctt 180

gcagatgcc a tacacgtgc agttactcaa ctgaaatgag gatagtatcg cagctttcgt 240

gaataaaacc tgaatcacco acaacaatgt tctaagtact cagcca 286

<210> 480
<211> 256
<212> DNA
<213> Glycine max

<400> 480

tcttccaggt aaaaaatcat ttcccattct ttgacatggc ttatcaagga ttttcaagt 60

gggatcttga caaggatgca atagcacttc gaattttcct tgaagatggg catttgattg 120

gttgtgtc aatcttttgca aagaacatgg gattatcaga acataaagct gggtgtctta 180

ggtaagaata gtcctatatc ctagtgagta gagattcaga ggcagagcat attctatgac 240

acgtataata gaagtt 256

<210> 481
<211> 232
<212> DNA
<213> Glycine max

<400> 481

ctttttatga tgttctgttc tgcattatct tcagggtcacg caacaaggaa tatattccgt 60

tcgttgggct tgctgatttt aataaattga gtgctaagct tatttttcgg gctgacagcc 120

ctgctattca agacaacagg gttaccactg ttcaatgctt gtctggaact gggtcttta 180

gagttggggg tgaatttttg gctaaacact atcaccaacg gactatatac tt 232

<210> 482
<211> 209
<212> DNA
<213> Glycine max

<223> unsure at all n locations
<400> 482

gccgaaaggn ttgngcaat caatgtgggt tcatcatcgc ccgaatctgc agcaagggt 60

nanagtcagt tgtaaggatt gcccgaccan gtactcta atctncagtaca cgnggtagat 120

agtnngcgtgt gttggaanca gtccttatga tgaagnga atgcatgtgggt gagntaagnt 180

tagcacgtat agtattattc aagacanag

209

<210> 483
<211> 236
<212> DNA
<213> Glycine max

<400> 483

ttccagagcc ccttctaaag aggatttcag atctctgcaa gaatgctggc tcttggttg 60

ttgttgataa tacatacgag tattttatgt atgatggcct gaaacactct tgtgttgagg 120

gaaatcatat tgttaatggt ttctcattct caaaagcata tggaatgatg ggatggcggg 180

ttggatatat agcgtacccc tctgaagtaa aagacttcgc tgaacaactt ctcaaa 236

<210> 484
<211> 247
<212> DNA
<213> Glycine max

<400> 484

ggaacttttg tgtgctgttc tacttctggt acatctcgtg aatcgtttgc aacttcttca 60

ccgttttctg tatgcagatg gcttcttcgt ttctatccgc agcttcgcac gctgtctcac 120

cctcttggtc tctgtccacc acgcacaacg ggaagcacat gcttggaggc aacactttga 180

gatttcacaa aggacccaat tccttctcta gttcaaggtc tagaggtcgg atctctatgg 240

ctgttgc 247

<210> 485
<211> 153
<212> DNA
<213> Glycine max

<400> 485

ccacagagga cccaattcct tctctagttc aaggtctacc ggctggatct ctatggctgt 60

tgcagttaac gtttctcggt ttgaaggcat acctctggcg cctcctgatc caattctagg 120

agtttctgag gcatttaagg tggacaatag tga 153

<210> 486
<211> 271
<212> DNA

<213> Glycine max

<400> 486

agagcagttg aaaaggattg cccgaccaat gtactctaata ccaccggtac acgggggctag 60
gatagttgcc gatgttgttg gaaacccagt tctctttaat gaatggaaag cagagatgga 120
aatgatggct ggaaggataa agaatgttag acagcagcta tatgatagta ttacttcgaa 180
agacaaaagt ggaaaggatt ggtcattcgt acttaagcag ataggcatgt tctcattcac 240
tggcttgaac aagaaccaga gtgacaacat g 271

<210> 487

<211> 247

<212> DNA

<213> Glycine max

<400> 487

aacggagcca aacagagtat tgctcaggca gtgcttgcag tttcctcccc tggagatgag 60
gttattattc cagctccatt ctgggttagt taccagaaa tggcaagggt ggctgatgca 120
acacctgtga ttcttccaac cttaatatct gataatttcc ttttggatcc caaactcctc 180
gaatccaaaa ttactgaaag atcaagactg cttattcttt gttctccatc taaccaaacg 240
ggatctg 247

<210> 488

<211> 261

<212> DNA

<213> Glycine max

<400> 488

cggagcaaac agagtattgc tcaggcagtg cttgcagttt cctcccctgg agatgaggtt 60
attattccag ctccattctg ggtagttac ccagaaatgg caaggttggc tgatgcaaca 120
cctgtgattc ttccaacctt aatatctgat aatttccttt tggatcccaa actcctcgaa 180
tccaaaatta ctgaaagatc aagactgctt attctttgag ctccatctaa cccaacggga 240
tctgtctacc ccaaagaatt a 261

<210> 489

<211> 273

<212> DNA

<213> Glycine max

<400> 489

gggattagtt atactcctga ccaagttgtg gttagtatcg gagccaaaca gagcattgct 60
caggcagtgc ttgcagtttg ctcccccgga gatgaggta ttattccagc tccattctgg 120
gttagttacc cagaaatggc aagggttggt gatgcgacac ctgtgattct tccaacctta 180
atatctgata atttcctttt ggatcccaaa ctcttgaat ccaaaattac tgaaagatcg 240
agactgctca ttctttgttc accatctaac cca 273

<210> 490

<211> 273

<212> DNA

<213> Glycine max

<223> unsure at all n locations

<400> 490

cggggctagg atagtngccg atgttgttgg aaaccagtt ctctttaatg aatggaaagc 60
agagatggaa atgatggctg gaaggataaa gaatgttaga cagcagctat atgatagtat 120
tacttcaaaa gacaaaagtg gaaaggattg gtcattcata cttaagcaga taggcatgtt 180
ctcattcact ggcttgaaca agaaccagag tgacaacatg acaacaagt ggacagtata 240
catgacaaag gatggaagga tttccctggc agg 273

<210> 491

<211> 258

<212> DNA

<213> Glycine max

<400> 491

aaagaatgtt agacagcagc tatatgatag tattacttca aaagacaaaa gtggaaagga 60
ttggtcattc atacttaagc agataggtat gttctcattc acgggcttga acacgaacca 120
gagtgacaac atgacaaaca agtggcacgt atacatgaca aaggatggaa ggatttccct 180
ggcaggattg tcattggcta aatgtgaata ccttgcagat gctattattg actcatatca 240
taatgtcagc tgaaactc 258

<210> 492

<211> 249

<212> DNA
<213> Glycine max

<400> 492

tgccgatggt gttggaaacc cagttctctt taatgaatgg aaagcagaga tggaaatgat 60
ggctggaagg ataaagaatg ttagacagca gctatatgat agtattactt caaaagacaa 120
aagtggaaag gattgggtcat tcataacttaa gcagataggc atgtttctcat tcaactggctt 180
gaacaagaac cagagtgaca acacgacaaa caagtggcac gtatacatga caaaggatgg 240
aaggatttc 249

<210> 493
<211> 268
<212> DNA
<213> Glycine max

<400> 493

gttcgcactc tgtctttccc ctgtttccgc gtcactgagt catcgcgatt cgcaactcgc 60
tcaccggcca attcctccgc cgcagctccg tcgccggagc aaggctcatg tcttcttctg 120
cctcatgggt ccggagcatc gagcccgtc ccaaggatcc tctctcgga gtcactgaag 180
ctttcctcgc cgatcagagt ccaaacaag tcaacgtcgg agtgggtgcg tatcgcgatg 240
accacggaaa acctgtggtt ttggaatg 268

<210> 494
<211> 268
<212> DNA
<213> Glycine max

<400> 494

ctctctccct ctctgttcgc actctgtctt tcccctgttt ccgcgtcact gagtcatggc 60
gattcgcaac tcgctcaccg gccaatctct ccgcgcgagc tccgtcgccg gagcaaggct 120
catgtcttct tcgtctcat ggttcgggag catcgagccc gctcccaagg atcctatcct 180
cggagtcact gaagctttcc tcgccgatca gagtccaaac aaagtcaacg tcggagtggg 240
tgcgtatcgc gatgaccacg gcaaacct 268

<210> 495
<211> 241

<212> DNA
<213> Glycine max

<400> 495

cctctctgtt cgcactctgt ctttcccttg tttccgcgtc actgagtcac tgcgattcgc 60
aactcgtcga ccggccaatt cctccgccgc agctccgtcg ccggagcaag gctcatgtct 120
tcttcgtcct catggttccg gagcatcgag cccgttccca aggatcctat cctcggagtc 180
actgaagctt tcttcgccga tcagagtcca aacaaagtca acgtcggagt ggggtgcgtat 240
c 241

<210> 496
<211> 170
<212> DNA
<213> Glycine max

<400> 496

ctctctccct ctctgttcgc actctgtctt tccctgttt ccgcgtcact gagtcacgc 60
gattcgcaac tcgtcaccg gccaatcct ccgccgcagc tccgtcgccg gagcaaggct 120
catgtcttct tcgtcctcat ggttccggag catcgagccc gctcccaagg 170

<210> 497
<211> 284
<212> DNA
<213> Glycine max

<223> unsure at all n locations
<400> 497

ggagatgggt tcgtccgtga agctttcagg agggccttgg aaactgagat gcccgttatg 60
gttcagatgc aggaattgca acgaggagct aagaatgcct tgtctttggc ccaggggggtg 120
gtttactggc agcctcccaa gcaagcgttg gaaaaagtga aagaacttgt atctgagcct 180
ttaattagtc gttatggtaa cgatgaaggc attcctgaac tcagagcagc attagtcaaa 240
aagttgcgng atgaaaataa tttgcacaaa tcttcagtat gggt 284

<210> 498
<211> 276
<212> DNA
<213> Glycine max

<400> 498

caacatttta ctgggtatat aagtggagag tgtaactgaa attatgtgga ggtgcatcaa 60

tggaagaatt gccagaagat ttttatccac ttcttctgcc agtgcccgtg gttggtggga 120

ccatgtaagg ccagcaccga aggaccccat tgttcgtgtg aacgaggcat ttctagctga 180

cccttttccc cataagatca atcttggaat aggtacttat aagggtgatg atggcaaagc 240

tttcattcct caaagcggtc gtgaggcaga aacaaa 276

<210> 499

<211> 290

<212> DNA

<213> Glycine max

<223> unsure at all n locations

<400> 499

attaagcaac attttactgn tgtatataag tggagagtgt aactgaaatt atgtggaggt 60

gcatcaatgg aagaattgcc agaagatttt tatccacttc ttctgccagt gcccgtgggt 120

ggtgggacca tgtaaggcca gcaccgaagg accccattgt tcgtgtgaac gaggcatttc 180

tagctgaccc ttttcccat aagagcaatc ttggaatagg tacttataag ggtgatgatg 240

gcaaagcttt cattcctcaa agcggttcgtg aggcagaaac aaagattcag 290

<210> 500

<211> 273

<212> DNA

<213> Glycine max

<400> 500

caacatttta ctgggtatat aagtggagag tgtaactgaa attatgtgga ggtgcatcaa 60

tggaagaatt gccagaagat ttttatccac ttcttctgcc agtgcccgtg gttggtggga 120

ccatgtaagg ccagcaccga aggaccccat tgttcgtgtg aacgaggcat ttctagctga 180

cccttttccc cataagatca atcttggaat aggtacttat aagggtgatg atggcaaagc 240

tttcattcct caaagcggtc gtgaggcaga aac 273

<210> 501

<211> 263

<212> DNA

<213> Glycine max

<400> 501

aagcaacatt ttactgggta tataagtgga gagtgtaact gaaattatgt ggaggtgcat 60
caatggaaga attgccagaa gattttttatc cacttcttct gccagtgcc gccaggtggtg 120
ggaccatgta aggccagcac cgaaggaccc cattgttcgt gtgaacgagg catttctagc 180
tgaccctttt ccccataaga tcaatcttgg aataggtact tataagggtg atgatggcaa 240
agcttttcatt cctcaaagcg ttc 263

<210> 502

<211> 246

<212> DNA

<213> Glycine max

<400> 502

gaattaagca acatttttact gggatatataa gtggagagtg taactgaaat tatgtggagg 60
tgcataaatg gaagaattgc cagaagatct ttatccactt cttctgccag tgcccgtggt 120
tggtgggacc atgtaaggcc agcaccgaag gacccattg ttcgtgtgaa cgaggcattt 180
ctagctgacc cttttcccca taagatcaat cttggaatag gtacttataa gggatgatgat 240
ggcaaa 246

<210> 503

<211> 261

<212> DNA

<213> Glycine max

<223> unsure at all n locations

<400> 503

taacatttta ctgggtatat aagtggagag tgtaactgaa attatgtgga tgtgcatcaa 60
tggaagaatt gccagaagat ttttatccac ttcttctgcc agtgcccgtg gttgggtggga 120
ccatgtaagg ccagcaccga aggaccccat tgttcgtgtg aacgaggcat ttctagctga 180
cccttttccc cataagatca atcttggnaa aggtacttat aagggtgatg atggcaaagc 240
tttcattcct caaagcgttc g 261

<210> 504

<211> 236

<212> DNA

<213> Glycine max

<400> 504

aagcaacatt ttactgggta tataagtgga gagtgttaacc gaaattatgt ggaggtgcat 60
caatggaaga attgccagaa gattttttatc cactttcttct gccagtgccg gtgggttggtg 120
ggaccatgta aggccagcac cgaaggaccc cattgttcgt gtgaacgagg catttctagc 180
tgaccctttt ccccataaga tcaatcttgg aataggtact tataagggtg atgatg 236

<210> 505

<211> 380

<212> DNA

<213> Glycine max

<400> 505

ctggttcttt aagagttggg ggtgaatttt tggctaaaca ctatcaccaa cggactatat 60
acttgccaac accaacttgg ggcaatcacc cgaagttttc aacttagcag gcttgtctgt 120
caaaacatac cgctactatg ctccagcaac acgaggactt gactttcaag gacttctgga 180
agaccttggg tctgctccat ctggatctat tgttttgcta catgcatgcg cacataaccc 240
cactggtgtg gatccaaccc ttgagcaatg ggagcagatt aggcagctaa taagatcaaa 300
agctttgtta cctttctttg acagtgttta tcagggtttt gctagtggaa gtctagatgc 360
agatgcccaa cctgttcggt 380

<210> 506

<211> 329

<212> DNA

<213> Glycine max

<223> unsure at all n locations

<400> 506

gcggactata tacttgccaa caccaacttg gggcaatcac ccgaagtttt caacttagca 60
ggcttgtctg tcaaaacata ccgtactatg ctccagcaac acgaggactt gactttcaag 120
gacttctgga agaccttggg tctgctccat ctggatctat tgttttgcta catgcatgcg 180
cacataaccc cactggtgtg gatccaaccc ttgagcaatg ggagcagatt aggcagctaa 240
taagatcaaa agctttgtta ctttctttga cagtgttat cagggtttgc tatggnatct 300
agattgcaga tgccaactgt cgttgttgt 329

<210> 507
 <211> 261
 <212> DNA
 <213> Glycine max

<223> unsure at all n locations
 <400> 507

attgttttgc tacatgcatg cgcacataac nacactgggtg tggatccaac ccttgagcaa 60
 tgggagcaga ttaggcagct aataagatca aaagctttgt tacctttctt tgacagtgt 120
 tatcagggtt ttgctagtgg aagtctagat gcagatgccc aacctgttcg tttgtttgtt 180
 gctgatggag gcgaattgct ggtagcacia agctatgcaa agaactctggg tctttatggg 240
 gaacgtgttg gcgccttaag c 261

<210> 508
 <211> 264
 <212> DNA
 <213> Glycine max

<400> 508

ttcaatgctt gtctggaact gggtctttaa gagttggggg tgaatttttg gctaaacact 60
 atcaccaacg gactatatac ttgccaacac caacttgggg caatcaccog aaggttttca 120
 acttagcagg cttgtctgtc aaaacatacc gctactatgc tccagcaaca cgaggacttg 180
 actttcaagg acttctggaa gaccttgggt ctgctccatc tggatctatt gttttgctac 240
 atgcatgcgc acataacccc actg 264

<210> 509
 <211> 264
 <212> DNA
 <213> Glycine max

<223> unsure at all n locations
 <400> 509

gggaagacct tggttctgct ccatctggat ctattgtttt gctacatgca tgcgcacata 60
 accccactgg tgtggatcca acccttgagc aatgggagca gattaggcag ctaatanoga 120
 tcaaaagctt tgttaccttt ctttgacagt gcttatcagg gttttgctag tggaagtcta 180
 gatgcagatg cccaacctgt tcgtttgttt gttgctgatg gaggcgaatt gctggtagca 240

caaagctatg caaagaatct gggt

264

<210> 510

<211> 287

<212> DNA

<213> Glycine max

<223> unsure at all n locations

<400> 510

gcggactata tacttgccaa caccaacttg gggcaatcac ccgangtttt caacttagca 60

ggcttgctctg tacaaaacat accgctacta tgctccagca acacgaggac ttgactttca 120

aggacttctg gaagaccttg gttctgctcc atctggatct atgttttgct acatgcatgc 180

gcacataacc ccaactggtgt ggatccaacc cttgagcaat gggagcagat tangcagcta 240

ataagatcaa aagctttggtt actttctttg acagngctta tcagggt 287

<210> 511

<211> 117

<212> DNA

<213> Glycine max

<400> 511

cagggtattgc tacatgcatg cgcacataac cccactggtg tggatccaac ccttgagcaa 60

tgggagcaga ttaggctgct aatatgatca aaagctttgt tatcttacta cgacagt 117

<210> 512

<211> 273

<212> DNA

<213> Glycine max

<400> 512

aacaatccta ctggtgctgc ggcaacaagg gaacaactga cccaactcgt tcagtttgct 60

aaggacaatg gtictatagt aatccatgat tcagcttatg caatgtatat ttctggtgac 120

aaccctcgt ctatTTTTga aatcctggag ccaaagaggt tgccatcgag acttcatcat 180

ttagcaagta tgctgggttc actggagtcc gattgggttg gactgtgggt ccaaagcagt 240

tgctgttttc tgatggattt cctgttgcca agg 273

<210> 513

<211> 237
<212> DNA
<213> Glycine max

<400> 513

aacaatccta ctggtgctgc ggcaacaagg gaacaactga cccactcgt tcagtttgct 60
acggacactg gttctatagt aatccatgat tcagcttatg caatgtatat ttctggtgac 120
aaccctcgtc ctatTTTTga aattcctgga gccacagagg ttgccatcga gacttcatca 180
tttagcaagt atgctggggt cactggagtc cgattggggt ggactgtggt tccaaag 237

<210> 514
<211> 276
<212> DNA
<213> Glycine max

<400> 514

ggggaacgtg ttggcgctt aagcattgtc tgcaagtcag ctgatgttgc aagcagggtt 60
gagagccagc tgaagctagt gattaggccc atgtactcaa gtcctcccat tcatggtgca 120
tccattgtgg ctgccattct caaggaccgg aatttgttca atgactggac tattgagttg 180
aaggcaatgg ctgatccatc atcagtatgc gccagaact ttctgatgct ttatgttcca 240
gaggcacacc tggcgattgg agtcacatta tcaaac 276

<210> 515
<211> 271
<212> DNA
<213> Glycine max

<400> 515

gcttatcagg gttttgctag tggaagtcta gatgcagatg cccaacctgt tcgtttgttt 60
gttgcctgatg gaggcgaatt gctggttagca caaagctatg caaagaatct gggctcttat 120
ggggaacgtg ttggcgctt aagcattgtc tgcaagtcag ctgatgttgc aagcagggtt 180
gagagccagc tgaagctagt gattaggccc atgtactcaa gtcctcccat tcatggtgca 240
tccattgtgg ctgccattct caaggaccgg a 271

<210> 516
<211> 283
<212> DNA

<213> Glycine max

<400> 516

tgcttatcag ggttttgcta gcggaagtct agatgcagat gccagcctg ttcgtttggt 60
tggtgctgat gggggtgaat tgctggtggc acaaagctat gcaaagaatc tgggtcttta 120
tggggaacgt gttggcgctt taagcattgt ctgaagtcag ctgatgttgc aagcagggtc 180
gagagccagc tgaaactagt gattaggccc atgtactcaa gtctctctat tcatggtgca 240
tccattgtgg ctgccattct caaggaccgg gatttgttca atg 283

<210> 517

<211> 227

<212> DNA

<213> Glycine max

<223> unsure at all n locations

<400> 517

aaagaatctg ggtctttatg gggaacngt tggcgctta agccttgtct gnccgtcagc 60
tgatgttgca agcagggttg agagccagct gaagctagtg attaggccca tgtactcaag 120
tctctccatt catggtgcat ccattgtggc tgccattctc aaggaccgga atttgttcaa 180
tgactggact attgagttga aggcaatggc tgatcgcatc atcagtt 227

<210> 518

<211> 259

<212> DNA

<213> Glycine max

<223> unsure at all n locations

<400> 518

aagctttgnt acctttcttt gacagtgcnn atcagggnn tgctagnnga agtctagatt 60
gcngatggcc caacctgttc gtttgtntgt tgntgatgna ggcgaattgc tggtagcaca 120
aagctatgcn aagaatctgg gtcttnatgg ggaacgtgtt ggcgccttaa gcanngtctg 180
caagtcant gatgttgcaa gcagggttga gagccagctg aagctagtga taggccccatg 240
tactcaagtc ctcccattt 259

<210> 519

<211> 280

<212> DNA

<213> Glycine max

<400> 519

aacagattgg aatgtttact ttcactggat tgaatgcgga acaagtttcc ttcattgacta 60
aagagttcca tatatacatg acatctgatg ggaggattag catggctggt ctgagttcca 120
aaactgtccc acttctggcg gatgcgatac atgcagctgt aacccgagtt gtctaaaaca 180
tgttgacaac agttttcaac atgctcccta gtccctatag gagaacttcc attatttttg 240
tttaataatt gtcaacatca acaatgaaac cttttatttg 280

<210> 520

<211> 250

<212> DNA

<213> Glycine max

<400> 520

acattatcaa acagattgga atgtttactt ttcactggatt gaatgcggaa caagtttcct 60
tcatgactaa agagttccat atatacatga catctgatgg gaggattagc atggctggtc 120
tgagttccaa aactgtccca cttctggcgg atgcgataca tgcagctgta acccgagttg 180
tctaaaacat gttgacaaca gttttcaaca tgctccctag tccctatagg agaacttcca 240
ttatttttgt 250

<210> 521

<211> 285

<212> DNA

<213> Glycine max

<400> 521

tacggctgcg aggacgacag aaggggataa tacatacgag tattttatgt atgatggcct 60
gaaacactct tgtgttgagg gaaatcatat tgttaatgtt tcctcattct caaaagcatt 120
tggatagatg ggatggcggg ttggatatat agcatatccc tctgaagtaa aagactttgc 180
tgaacatctt ctcaaagttc aagacaacat tcccatctgt gcttcaatat tatcacagta 240
tcttgccctg tattcattgg aagtggggcc tcaatggggt gtaga 285

<210> 522

<211> 249

<212> DNA

<213> Glycine max

<400> 522

gggaaatcat attgttaatg ttttctcatt ctcaaaagca tttggaatga tgggatggcg 60
ggttgatgat atagcatatc cctctgaagt aaaagacttt gctgaacaac ttctcaaagt 120
tcaagacaac attcccatct gtgcttcaat attatcacag tatcttgccc tgtattcatt 180
ggaagtgggg cctcaatggg ttgtagatca ggtaaaaact cttgaaaaga acagagaaat 240
tgttttaga 249

<210> 523

<211> 264

<212> DNA

<213> Glycine max

<400> 523

gttgcgtgat gaaaataatt tgcacaaatc ttcagtaatg gttacatcag gtgccaatca 60
ggcatttgtg aatctagtct ttactctctg tgatccgggt gattctgtgg ttatgtttgc 120
tccttactac ttcaatgcgt acatgtcctt ccagatgact ggcattacca atattctagt 180
tggtcctggg agctcagaca cactccatcc tgatgcaggg gggtcacata ttggttaaatt 240
gttggatgga ttgggtctgt atac 264

<210> 524

<211> 296

<212> DNA

<213> Glycine max

<400> 524

cctggattta caacagtaac aagctttgga gccggtttat tttctgataa tattctttcc 60
aaccaatctg catcaggatg gagtgtgtct gagctaccag gaccaactag aatattggta 120
atgccagtca tctggaagga catgtacgca ttgaagtagt aaggagcaaa cataaccaca 180
gaatcacccg gatcacagag agtaagaact agattcacia atgcctgatt ggcacctgat 240
gtaaccatta ctgaagattt gtgcaaatta ttttcatcac gcaacttttt gactaa 296

<210> 525

<211> 284

<212> DNA

<213> Glycine max

<400> 525

gtggaagcct tgatgaagat gcagcttctg tgagactggt tgtggcacgt gggcatcgag 60
gttcttgtag ctcaatctta cagtaaaaat ctcggtctct atgctgaaag gattggagca 120
atcaatgtga tttcatcgtc accagaatct gcagcaaggg taaagagcca actgaaaagg 180
attgcccgcac caatgtactc taatccaccg gtacacgggg ctaggatagt tgccgatggt 240
gttggaaacc cagttctctt taatgaatgg aaagcagaga tgga 284

<210> 526

<211> 253

<212> DNA

<213> Glycine max

<400> 526

gaaaagaacc acattccctt ttttgatggt gcttaccagg gggttgctag tggaagcctt 60
gatgaagatg cagcttctgt gagactgttt gtggcacgtg gcatcgaggt tcttgtagct 120
caatcttaca gtaaaaatct cgggtctctat gctgaaagga ttggagcaat caatgtgatt 180
tcatcgtcac cagaatctgc agcaagggtg aagagccaac tgaaaaggat tgcccgcacca 240
atgaactcta atc 253

<210> 527

<211> 262

<212> DNA

<213> Glycine max

<223> unsure at all n locations

<400> 527

gcttcttcgt ttctatccgc agcttcgcac gctgtctcac cctcttggtc tctgtccacc 60
acgcacaagg ganagcccat gcttggaggc aacactttga gatttcacaa aggacccaat 120
tccttctcta gttcaaggtc tagaggtcgg atctctatgg ctgttgcagt taatgtatct 180
cggtttgaag gcatacctat ggctcctcct gatccaattc tcggagtttc cgaggcggtt 240
aaggcagaca atagtgatgt ca 262

<210> 528

<211> 277

<212> DNA
<213> Glycine max

<400> 528

ctacaacaca cttttgtaag tgattcggtc gcagaaacat ggcattctcg ttgctatccg 60
cagcttcgca cgctgtctca cctcttgggt ctctgtccac cagcacaag ggatagccca 120
tccttggagg caacactttg agatttcaca aaggacccaa ttccttctct agttcaaggt 180
ctatagggtcg gatctctatg gctgttgcag ttaatgtatc tcggtttgaa ggcataccta 240
tggctcctcc tgatccaatt ctgggatttt ccgaggt 277

<210> 529
<211> 266
<212> DNA
<213> Glycine max

<400> 529

cgcacttcgc acgctgtctc accctcttgc tctctgtcca ccacgcacaa gggacatcca 60
ttcttggagg caacactttg agatttcaca aaggacccaa ttccttctct agttcaaggt 120
ctagagggtcg gatctctatg gctgttgcag ttaatgtatc tcggtttgaa ggcataccta 180
tggctcctcc tgatccaatt ctgggagttt ccgaggcggt taaggcagac aatagtgatg 240
tcaagctcaa tcttggagtt ggggca 266

<210> 530
<211> 257
<212> DNA
<213> Glycine max

<400> 530

gtttccttca tcttcttctt cttcttctat ctctctacaa cacacttttt taagtgattc 60
gttcgcagaa acatggcttc ttcggttcta tccgcagctt cgcacgctgt ctcacctct 120
tggtctctgt ccaccacgca caagggaag cccatgcttg gaggcaacac tttgagattt 180
cacaaaggac ccaattcctt ctctagttca aggtctagag gtcggatctc tatggctgtt 240
gcagttaatg tatctcg 257

<210> 531
<211> 271

<212> DNA
<213> Glycine max

<400> 531

gagatttcac aaaggaccca attccttctc tagttcaagg tctagaggtc ggatctctat 60
ggctgttgca gttaatgtat ctcggtttga aggcatacct atggtcctc ctgatccaat 120
tctcggagtt tccgaggcgt ttaaggcaga caatagtgat gtcaagctca atcttggagt 180
tggggcatac agaacagaag aactacagcc atatgtgctt atgttgtaa gaaggctctt 240
gttccgtatt ttatgtgtct tctgtgattt g 271

<210> 532
<211> 244
<212> DNA
<213> Glycine max

<223> unsure at all n locations
<400> 532

ctacaacaca cttttttaag tgattcgttc gcagaaacat ggcttcttcg nttctatccg 60
cagcttcgca cgctgtctca nctcttgctt tctgtccanc acgcacaagg gagagcccat 120
gcttggaggc aacactttga gatttcacaa aggacccaat tctctcttag ttcaaggctt 180
agaggtcgga tctctatggc tggtgcagtt aatgtatctc ggtttgaagg catacctatg 240
gcnc 244

<210> 533
<211> 272
<212> DNA
<213> Glycine max

<400> 533

cactgtttcc ttcatcttct tcttcttctt ctatctctct acaacacact tttttaagtg 60
attcgttcgc agaaacatgg cttcttcggt tctatccgca gcttcgcacg ctgtctcacc 120
ctcttggtct ctgtccacca cgacaaggga aagcccatgc ttggaggcaa cactttgaga 180
tttcacaaag gacccaattc cttctctagt tcaaggctta gaggtcggat ctctatggct 240
gttgcagtta atgtatctcg gtttgaaggc at 272

<210> 534

<211> 288
 <212> DNA
 <213> Glycine max

<223> unsure at all n locations
 <400> 534

tgccgaattc cgctcgagct cgagccggtt tcctcatct tcttcttctt cttctatctc 60
 tctacaacac acttttttaa cacattcggt cgcagaaaca tggttcttc gtttctatcc 120
 gcagcttcgc acgctgtctc accctcttgt tctctgtcca ccacgcacaa gggacagccc 180
 atgcttgagg gcaacacttt gagatttcac aaaggaccca attccttctc tagttcaagg 240
 tctagaggtc ggatctctat ggctgttgca gttaatgtat ctcggttt 288

<210> 535
 <211> 254
 <212> DNA
 <213> Glycine max
 <400> 535

atcttctatt gcagatggct tcgtcgggtc tctccgcagc ttgcactct gtctcaccct 60
 catgttctct gtccaccacg cacaaggga agcccatgat tagagacaac actttgggat 120
 tccacagagg acccaattcc ttctctagtt caagggtctag aggtcggatc tctatggctg 180
 ttgcagttaa cgtttctcgg tttgaaggca tacctatggc gcctcctgat ccaattctag 240
 gagtttctga ggca 254

<210> 536
 <211> 272
 <212> DNA
 <213> Glycine max

<223> unsure at all n locations
 <400> 536

tgttctgttc tgnctgna catctogtna atcgnttana anttcttaac cgtnttctgt 60
 tgcagctggg cttctncgtt tatntaccgc agcttngcac gctgtntcac nctcttgttc 120
 tctgtnnacc angcacaagg gaaagcacat gcttggaggc aacactttga gatttcacaa 180
 aggncccaat tccttctcta gttcaaggtc tagaggctcg atctctatgg ctgttgagc 240
 taatgtatct cggtttgaag gcatacctat ng 272

<210> 537
 <211> 275
 <212> DNA
 <213> Glycine max

<400> 537

cctcgagccg attcggctcg aggttacatc tcgtgaattg ttacaatctg ttaaccattt 60
 tccattgcag atggcttcgt cacttctctc cgcagcttcg cactctgtct caccctcatg 120
 ttctctgtcc accacgcaca gggaaagccc atgattagag acaacacttt gggtttccac 180
 agaggacca attccttctc tagttcaagg tctagaggtc ggatctctat ggctgttgca 240
 gttaacgttt ctcggtttga aggcatacct atggc 275

<210> 538
 <211> 277
 <212> DNA
 <213> Glycine max

<223> unsure at all n locations
 <400> 538

agaaacatgg ctctcgctgg tctctccgca gcttcgcacn cctgtctcac cctcatgttc 60
 nctgtncacc acgcacaagg gnaagcccat gantagagac aanactttgg gattccacag 120
 aggacccaat tccttctcna gttcaaggtn tagaggtcgg ntctctatgg ctgttgca 180
 taacgnttct cgggttngag gcatacctat gggcgccctcc tgatccaaat tcttagggag 240
 tttctgaggn atntaagggtg gaccaatagt ggtgtnc 277

<210> 539
 <211> 254
 <212> DNA
 <213> Glycine max

<400> 539

agattaatca atcatagata gatccattat tcatagttaa acataataac tgttgtgtta 60
 catctcgtga attgttacia ctgcttaacc attttctatt gcagatggct tcgtcgggtc 120
 tctccgcagc ttgcactct gtctcacct catgttctct gtccaccacg cacaagggaa 180
 agcccatgat tagagacaac actttgggat tccacagagg acccaatttc ttctctagtt 240
 caaggtctag aggt 254

<210> 540
 <211> 267
 <212> DNA
 <213> Glycine max

<400> 540

atcgtattct ctacgtatt cctattaaat gaatcatagt catagataga tccattattc 60
 atagtttaaa ttaggaacct tttgtgttct gttctgttct gttacatctc gtgaatcggt 120
 tacaacttct taaccgtttt ctgttgcaga tggcttcttc gtttctatcc gcagcttcgc 180
 acgctgtctc accctcttgt tctctgtcca ccacgcacaa gggaaagccc atgcttggag 240
 gcaacacttt gagatttcac aaaggac 267

<210> 541
 <211> 259
 <212> DNA
 <213> Glycine max

<400> 541

cgctattcct attaaatgaa tcatagtcac agatagatcc attattcata gtttaaatta 60
 ggaacctttt gtgctctgtt ctgttctgtt acatctcgtg aatcgtttac aacttcttaa 120
 ccgttttctg ttgcagatgg cttcttcgtt tctatccgca gcttcgcacg ctgtctcacc 180
 ctcttgttct ctgtccacca cgcacaaggg aaagcccatg cttggaggga acactttgag 240
 atttcacaaa ggacceaat 259

<210> 542
 <211> 259
 <212> DNA
 <213> Glycine max

<400> 542

tacgtatttc cgattaatca atcatagata gatccattat tcatagttaa acataataac 60
 tgttgtgtta catctcgtga attgttacia ctgcttaacc attttctatt gcagatggct 120
 tcgtcggttc tctccgcagc ttgcactct gtctcaccct catgttctct gtccaccaag 180
 cacaagggac agcccatgat tagagacaac actttggatt ccacagagga cccaattcaa 240
 tctctagttc aaggtctag 259

<210> 543
 <211> 270
 <212> DNA
 <213> Glycine max

<400> 543

ttcgtattct ctacgtatt ccgattaatc aatcatagat agatccatta ttcatagtta 60
 aacataataa ctgttggtgtt acatctcgtg aattggttaca actgcttaac cattttctat 120
 tgcagatggc ttcgctcggtt ctctccgcag cttcgccactc tgtctcacc ccatgttctc 180
 tgtcaaccac gcacaaggga gagcccatga ttagagacaa cactttggga ttccacagag 240
 gacacaattc cttctctagt tcaaggtcta 270

<210> 544
 <211> 266
 <212> DNA
 <213> Glycine max

<400> 544

gcatacctat ggcgcctcct gatccaattc taggagtttc tgaggcattt aaggtggaca 60
 atagtgatgt caagctcaat cttggagttg gggcatacag aacagaagaa ctacagccat 120
 atgtgcttaa tgttggttaag aaggcagaga atcttatgct ggagagaggg gataacaaag 180
 agtatctccc aattgagggg tgggctgcat ttaataaggc aactgcagag ttgttacttg 240
 gagcagacaa cccagcaatc aaacag 266

<210> 545
 <211> 169
 <212> DNA
 <213> Glycine max

<223> unsure at all n locations
 <400> 545

cttgggagtt ggggcataca gaacagaaga actacagcca tatgtincta atgttggttaa 60
 gaaggcagag aatcttatgc tggagagagg ggataacaaa gagtatctcc caattgaggg 120
 tttggcagca ttttaataagg caactgcaga gttgttactc ggagcagac 169

<210> 546

<211> 272
<212> DNA
<213> Glycine max

<400> 546

ctatcctcgg ggtaactgtc gcttataaca aagatccaag tccagttaag ctcaacttgg 60
gagttggtgc ttaccgaact gaggaaggaa aacctcttgt tttgaatgta gtgaggcgag 120
ttgaacagca actcataaat gacgtgtcac gcaacaagga atatattccg atcgttgggc 180
ttgctgattt taataaattg agtgctaagc ttatTTTTTgg ggctgacagc cctgctattc 240
aagacaacag ggttaccact gttcaatgct tg 272

<210> 547
<211> 270
<212> DNA
<213> Glycine max

<400> 547

cttccgcaaa tggcttctca cgacagcatc tccgcttctc caaactccgc ttctgattcc 60
gtcttcaatc acctcgttcg tgctcccgaa gatcctatcc tcggggtaac tgctgcttat 120
aacaagatc caagtccagt taagctcaac ttgggagttg gtgcttaccg aactgaggaa 180
ggaaaacctc ttgttttgaa tgtagtgagg cgagttgaac agcaactcat aaatgacgtg 240
tcacgcaaca aggaatatat tccgatcggt 270

<210> 548
<211> 281
<212> DNA
<213> Glycine max

<400> 548

tgcaaattggc ttctcagac agcatctccg cttctccaac ctccgcttct gattccgtct 60
tcaatcacct cgttcgtgct cccgaagatc ctatcctcgg ggtaactgtc gcttataaca 120
aagatccaag tccagttaag ctcaacttgg gagttggtgc ttaccgaact gaggaaggaa 180
aacctcttgt tttgaatgta gtgaggcgag ttgaacagca actcataaat gacgtgtcac 240
gcaacaagga atatattccg atcgttgggc ttgoggattt a 281

<210> 549

<211> 257
 <212> DNA
 <213> Glycine max

<400> 549

cgcttctgat tccgtcttca atcacctcgt tcgtgctccc gaagatccta tcctcgggggt 60
 aactgtcgct tataacaaaag atccaagtcc agttaagctc aacttgggag ttggtgctta 120
 ccgaactgag gaaggaaaac ctcttgTTTT gaatgtagtg aggcgagttg aacagcaact 180
 cataaatgac gtgtcacgca acaaggaata tattccgata gttgggcttg ctgattttta 240
 taaattgagt gctaagc 257

<210> 550
 <211> 282
 <212> DNA
 <213> Glycine max

<400> 550

caacactctc tccagacact tccttcatca aatggcttct cacgacggca tctccgctgc 60
 ttcttcagat tccgtcttca atcacctcgt tcgtgctccc gaagatccta tcctcgggggt 120
 aactgttgct tataacaaaag atccaagtcc agttaagctc aacttgggag ttggtgctta 180
 ccgaactgag gaaggaaaac ctcttgTTTT gaatgtagtg aggcgagttg agcagcaact 240
 cataaatgac gtgtcacgca acaaggaata tattccgatt gt 282

<210> 551
 <211> 250
 <212> DNA
 <213> Glycine max

<400> 551

cttccgcaaa tggcttctca cgacagcatt tccgcttctc caacctccgc ttctgattcc 60
 gtcttcaatc acctcgttcg tgctcccgaa gatcctatcc tcggggtaac tgctgcttat 120
 aacaaagatc caagtccagt taagctcaac ttgggagttg gtgcttaccg aactgaggaa 180
 ggaaaacctc ttgttttgaa tgtagtgagg cgagttgaac agcaactcat aaatgacgtg 240
 tcacgcaaca 250

<210> 552

<211> 273
 <212> DNA
 <213> Glycine max

<400> 552

ctcgctagac acttccttcc gcaaattggct tctcacgaca gcatctccgc ttctccaacc 60
 tccgcttctt attccttctt caatcacctc gttcgtgctc ccgaagatcc tatcctcggg 120
 gtaactgtcg cttataacaa agatccaagt ccagttaagc tcaacttggg agttgggtgt 180
 taccgaactg aggaaggaaa acctcttggt ttgaatgtag tgaggcgagt tgaacagcaa 240
 ctcataaatg acgtgtcacg caacaaggaa tat 273

<210> 553
 <211> 262
 <212> DNA
 <213> Glycine max

<223> unsure at all n locations
 <400> 553

ctgtgatcgc agactcaaca ctctcgctag acanttcctt ccgcaaatgg cttctcacga 60
 cagcatctcc gcttctccaa cctccgcttc tgattccgtc ttcaatcacc tcgttcgtnc 120
 tcccgaagat cctatcctcg gggtaactnt ngcttataac aaagatccaa gtccagttaa 180
 gctcaacttg ggagttggtg cttaccgaac tgaggaagga aaacctcttg ttttgaatgt 240
 agtgaggcga gtgaacagca at 262

<210> 554
 <211> 239
 <212> DNA
 <213> Glycine max

<223> unsure at all n locations
 <400> 554

agttaagctc aacttgggag ttggtgctta ccgaactgag gaaggaaaac ctcttgtttt 60
 gaatgtagtg ancgagttg aacagcaact cataaatgac gtgtcacgca acaaggaata 120
 tattccgata gttgggcttg ctgattttaa taaattgagt gctaagctta tttttggggc 180
 tgacagccct gctattcaag acaacagggt taccactgtt caatgcttgt ctggaactg 239

<210> 555

<211> 253
 <212> DNA
 <213> Glycine max

<400> 555

atggcttctc acgacggcat ctccgctgct tcttcagatt ccgtcttcaa tcacctcggt 60
 cgtgctcccg aagatcctat cctcggggta actgttgctt ataacaaaga tccaagtcca 120
 gttaagctca acttgggagt tgggtgcttac cgaactgagg aaggaaaacc tcttggtttg 180
 aatgtagtga ggcgagttga gcagcaactc ataaatgacg tgtcacgcaa caaggaatat 240
 attccgattg ttg 253

<210> 556
 <211> 252
 <212> DNA
 <213> Glycine max

<400> 556

tctaattcgt ggaggggaata cttttccatt acgcacgcac ttttaattaca gacgagaaaa 60
 ttataattaa tagtaataca gacagcagca tgcgcccacc gggtattctc aaaactacca 120
 cctctctttt ggattcttct tcttcttcac caccctgtga tcgcagactc aacactctcg 180
 ctagacactt ccttccgcaa atggcttctc acgacagcat ctccgcttct ccaacctccg 240
 cttctgattc cg 252

<210> 557
 <211> 249
 <212> DNA
 <213> Glycine max

<400> 557

caaatggctt ctcacgacgg catctccgct gcttcttcag attccgtctt caatcacctc 60
 gttcgtgctc ccgaagatcc taccctcggg gtaactgttg cttataacaa agatccaagt 120
 ccagttaagc tcaacttggg agttggtgct taccgaactg aggaaggaaa acctcttggt 180
 ttgaatgtag tgaggcgagt tgagcagcaa ctcataaatg acgtgtcacg caacaaggaa 240
 tatattccg 249

<210> 558

<211> 250
 <212> DNA
 <213> Glycine max

<400> 558

atggcttctc acgacggcat ctccgctgct tcttcagatt ccgtcttcaa tcacctcggt 60
 cgtgctcccg aagatcctat cctcggggta actgttgctt ataacacaga tccaagtcca 120
 gttaagctca acttgggagt tgggtgcttac cgaactgagg aaggaaaacc tcttggtttg 180
 aatgtagtga ggcgagttga gcagcaactc ataaatgacg tgtcacgcaa caaggaatat 240
 attccgattg 250

<210> 559
 <211> 261
 <212> DNA
 <213> Glycine max

<400> 559

gttcacgcga gactcaacac tctctccaga cacttccttc atcaaattggc ttctcacgac 60
 ggcatctccg ctgcttcttc agattccgtc ttcaatcacc tcgttcgtgc tccogaagat 120
 cctatcctcg ggggtactgtt gcttataaca aagatccaag tccagttaag ctcaacttgg 180
 gagttggtgc ttaccgaact gaggaaggaa aacctcttgt tttgaatgta gtgaggcgag 240
 ttgagcagca actcataaat g 261

<210> 560
 <211> 248
 <212> DNA
 <213> Glycine max

<223> unsure at all n locations
 <400> 560

accacctgt gatngcagac tcaaacactct cgctagacac ttccctccgc aaatngcttc 60
 tcangacagc atctccgctt ctncaacctc cgcntctgat tccgtcttca atcacctcgt 120
 nngnntcnc naanactcta tntcgggggt aactnnagct tataacaaag atccaagtnc 180
 agttaagctc aacttgggag ttgggtgctta ccgaactgag gaaggaaaac ctcttgtttt 240
 gaatgtag 248

<210> 561
 <211> 235
 <212> DNA
 <213> Glycine max

<400> 561

gctcaacttg ggagttggtg cttaccgaac tgaggaagga aaacctcttg ttttgaatgt 60
 agtgaggcga gttgaacagc aactcataaa tgacgtgtca cgcaacaagg aatatattcc 120
 gatcgttggg cttgctgatt ttaataaatt gagtgctaag cttatTTTTg gggctgacag 180
 ccctgctatt caagacaaca gggttaccac tgttcaatgc ttgtctggaa ctggt 235

<210> 562
 <211> 260
 <212> DNA
 <213> Glycine max

<223> unsure at all n locations
 <400> 562

gttcatcgca gactcaacac tctctccaga cacttccttc atcaaattggc ttctncacga 60
 cggcattctc gctgcttctt cagattccgt cttcaatcac ctcggttcgtg ctcccgaaga 120
 tcctatcctc ggggtaactg ttgcttataa caaagatcca agtccagtta agctcaactt 180
 gggagttggt gcttaccgaa ctgaggaagg aaaacctctt gttttgaatg tagtgaggcg 240
 agttgagcag caactcataa 260

<210> 563
 <211> 248
 <212> DNA
 <213> Glycine max

<400> 563

cagacacttc cttcatcaaa tggcttctca cgaaggcatc tccgctgctt cttcagattc 60
 cgtcttcaat cacctcgttc gtgctccga agatcctatc ctcggggtaa ctgttgctta 120
 taacaaagat ccaagtccag ttaagctcaa cttgggagtt ggtgcttacc gaactgagga 180
 aggaaaacct cttgttttga atgtagttag gcgagttgag cagcaactca taaatgacgt 240
 gtcacgca 248

<210> 564

<211> 266
<212> DNA
<213> Glycine max

<400> 564

ctttggattc ttattgttca tcgcagactc aacactctct ccagacactt ccttcatcaa 60
atggcttctc acgacggcat ctccgctgct tcttcagatt ccgtcttcaa tcacctcggt 120
cgtgctcccg aagatcctat cctcggggta actgttgctt ataacaaaga tccaagtcct 180
gttaagctca acttgggagt tgggtgcttac cgaactgagg aaggaaaacc tcttgttttg 240
aatgtagtga ggcgagttga gcagca 266

<210> 565
<211> 254
<212> DNA
<213> Glycine max

<400> 565

gttcatcgca gactcaacac tctctccaga cacttccttc atcaaattggc ttctcacgac 60
ggcatctccg ctgcttcttc agattccgtc ttcaatcacc tcgttcgtgc tccgaagat 120
cctatcctcg gggtaactgt tgcttataac aaagatccaa gtccagttaa gctcaactgg 180
gagttgggtgc ttaccgaact gaggaaggaa aacctcttgt tttgaatgta gtgaagcgag 240
ttgagcagca actc 254

<210> 566
<211> 230
<212> DNA
<213> Glycine max

<400> 566

cacttccttc cgcaaattggc ttctcacgac agcatctccg cttctccaac ctccgcttct 60
gattccgtct tcaatcacct cgttagttct cccgaagatc ctatcctcgg ggtaactgtc 120
gcttataaca aagatccaag tccagttaag ctcaacttgg gagttgggtgc ttaccgaact 180
gaggtaggaa aacctcttgt tttgaatgta gtgaggcgag ttgaacagca 230

<210> 567
<211> 249
<212> DNA

<213> Glycine max

<400> 567

ttaaaaatga aataagaaaa actcaacttt gtaattcgtg gagggaatac ttttccatta 60
cgacgcact ttaattacag acgagaaaaat tataattaat agtaatacag acagcagcat 120
gcgcccaccg gttattctca aaactaccac ctctcttttg gattcttctt cttcttcacc 180
accctgtgat cgcagactca acactctcgc tagacacttc cttccgcaaa tggctttctca 240
cgacagcat 249

<210> 568

<211> 266

<212> DNA

<213> Glycine max

<400> 568

cctcgagccg cttccgcaaa tcgctttctca cgacagcatc tccgcttctc caacctccgc 60
ttcaccttcc gtcttcaatc acctcggttcg tgctcccgaa gatcctatcc tcgggggtaac 120
tgctcgcttat aacaaagatc caagtccagt taagctcaac ttgggagttg gtgcttaccg 180
aactgaggaa ggaaaacctc ttgttttgaa tgtagtgagg cgagttgaac agcaactcat 240
aatgacgtg tcacgcaaca aggatt 266

<210> 569

<211> 269

<212> DNA

<213> Glycine max

<400> 569

ctottattgt tcatcgcaga ctcaaacctc tctccagaca cttccttcat caaatggctt 60
ctcacgacgg catctccgct gcttcttcag attccgtctt caatcacctc gttcgtgctc 120
ccgaagatcc tatcctcggg gtaactgttg cttataacaa agatccaagt ccagttaagc 180
tcaacttggg agttggtgct taccgaactg aggaaggaaa acctcttggt ttgaatgtag 240
tgaggcgagt tgagcagcaa ctcataaat 269

<210> 570

<211> 251

<212> DNA

<213> Glycine max

<400> 570

atcgagact caacactctc tccagacact tccttcatta caatggcttc tcacgacggc 60
atctccgctg ctctctcaga ttccggtttc aatcacctcg ttcgtgctcc cgaagatcct 120
atcctcgggg taactgttgc ttataacaaa gatccaagtc cagttaagct caacttggga 180
gttggtgctt accgaactga ggaaggaaaa cctcttggtt tgaatgtagt gaggcgagtt 240
gagcagcaac t 251

<210> 571

<211> 264

<212> DNA

<213> Glycine max

<223> unsure at all n locations

<400> 571

ccttcatcaa atggcttctc acgacggcat ctccgctgct tcttcagatt ccgtcttcaa 60
tccacctcgt tcgtgctccc gaagatccta tcctcgggggt aactgttgct tataacaaag 120
atccaagtcc agttaanctc aacttgggan ttggtgttac cgaactgagg aagggaac 180
ctcttggttt gaatgtagtg aggcgagttg agcagcaact cataaatgan gtgtcncgca 240
acaagnattt nccncgtggg gggg 264

<210> 572

<211> 260

<212> DNA

<213> Glycine max

<400> 572

tccatgcgcc caccggttat tctcaaaact accacctctc ttttgattc ttcttcttct 60
tcaccacct gtgatgcag actcaacact ctgctagac acttccttcc gcaaatoget 120
tctcagaca gcatctcgc ttctccaacc tccgcttctg attcgtctt caatcacctc 180
gttcgtctc ccgaagatcc tatctcggg gtaactatcg cttataacaa agatccaagt 240
ccagttaage tcaacttggg 260

<210> 573

<211> 251

<212> DNA
<213> Glycine max

<400> 573

tacggctgcg agaaggacag aagggtagcg ctgcgagaag acgacagaag ggggcagact 60
caacactctc tccagacact tccttcatca aatggcttct cagcagggca tctccgctgc 120
ttcttcagat tccgtcttca atcacctcgt tcgtgctccc gaagatccta tcctcgggggt 180
aactgttgct tataacaaag atccaagtcc agttaagctc aacttgggag ttggtgctta 240
ccgaactgag g 251

<210> 574
<211> 185
<212> DNA
<213> Glycine max

<400> 574

ctcggggtaa ctgtcgctta taacaaagat ccaagtccag ttaagctcaa ctcgggagtt 60
ggtgcttacc gaactgagga cagaaaacct cttgttttga atgtagtacg cgagttgaac 120
agcaactcat aaatgacgtg tcacgcaaca aggaatatat tccgatcggt gggcttgctg 180
atattt 185

<210> 575
<211> 249
<212> DNA
<213> Glycine max

<400> 575

gaaagatcaa gactgcttat tctttgttct tcatctaacc caacgggatc tgtctacccc 60
aaagaattac ttgaagagat agcccgaatt gttgcaaagc accccagggt tctgggttctc 120
tctgatgaaa tttaacgaaca cataatttat gcaccagcaa ctacacagag ctttgcatct 180
ttaccaggaa tgtgggacag aactcttact gtgaatggat tttctaaggc ctttgcaatg 240
actggttgg 249

<210> 576
<211> 276
<212> DNA
<213> Glycine max

<400> 576

gatagcccgga attgttgcaa agcaccaccag gcttctgggtt ctctctgatg aaattttacga 60
acacataatt tatgcaccag caactcacac gagcttttgca tctttaccag gaatgtggga 120
cagaactctt actgtgaatg gatTTTTctaa ggccttttgca atgactgggtt ggcggcttgg 180
atatattgct ggtccaaaac attttgttgc agcatgtgga aagatccaaa gtcagttttac 240
ttcagggggcc agtagtatag ctcagaaagc tgcagt 276

<210> 577

<211> 264

<212> DNA

<213> Glycine max

<223> unsure at all n locations

<400> 577

gcaaagcacc ccaggntcnt ggttntctcc gatgaaattt atgaacacat aattttatgca 60
ccagcaactg cacacaagtt ttgcatcttt accaggantg tgggacagaa ctcttactgt 120
gaatggattt tccaaggcct ttgcaatgan tggttggcgg cttggatata ttgctgggtcc 180
aaaacacttt gttgcagcat gtggaaagat ccaaagtcag ttcacttcag gggccagtag 240
tatagctcag aaagctgcag ttgc 264

<210> 578

<211> 286

<212> DNA

<213> Glycine max

<400> 578

caagagatag cccaaattgt agcaaagcac cccaggcttc tggttctctc tgatgaaaat 60
tatgaacaca taatttatgc accggcaact catacaagct ttgcatcggt accgggaatg 120
tgggacagaa ctctaattgt gaatggactt tccaagacat ttgcaatgac tggttggcgg 180
cttgggtata ttgctgggtcc aaaacatttt gttgctgcat gtgaaaagat tcaaagccag 240
tttacttcag gggcaagtag tatactctcag aaagctgggg ttgctg 286

<210> 579

<211> 233

<212> DNA

<213> Glycine max

<400> 579

gatagccga attgttgca agcaccacag gcttctggtt ctctctgatg aaatttacga 60
acacataatt tatgcaccag caactcacac gagctttgca tctttaccag gaatgtggga 120
cagaactcct actgtgaatg gattttctaa ggcctttgca atgactgggtt ggcggcttgg 180
atatattgct ggtccaaaac attttgttgc agcatgtgga aagatccaaa gtc 233

<210> 580

<211> 284

<212> DNA

<213> Glycine max

<400> 580

ggattttcta aggcctttgc aatgactgggt tggcggcttg gatatatattgc tgggtccaaa 60
cattttgttg cagcatgtgg aaagatccaa agtcagttta cttcaggggc cagtagtata 120
gtcagaaaag ctgcagttgc tgcattagga ctaggccatg ctggtgggga ggcagtttct 180
accatgggtga aagcatttag ggagcgaagg gatttcttag taaaagttt tagagaaata 240
gatggcatca agatatctga accccaggga gcattttatc tatt 284

<210> 581

<211> 247

<212> DNA

<213> Glycine max

<400> 581

gctccagcta ctcatacaag ttttgcattt ttacctggaa tgtgggaccg aactctaact 60
gtgaatggat tttccaagac atttgcaatg actggttggc ggcttgggta cattgctgggt 120
acaaaacatt ttgttgcagc atgcggaaaag attcaaagtc agttcacttc aggtgcaagt 180
agtatatctc agaaagctgg agttgctgca ttaggactag gctatgctgg tggggaagct 240
gtttcaa 247

<210> 582

<211> 260

<212> DNA

<213> Glycine max

<223> unsure at all n locations
 <400> 582

ctgaacttgg agagccatgg gtactaccat gcgttcggaa aactgagctg ttgatggcgc 60
 agaatgattc gcttaatcac gagtacctcc ccgtgttggg gttcgaacca tttngtaaag 120
 ctgctgtcac tcttttgctc ggtgacgtcg agaattccac acnactagcc gacgcnaggg 180
 ctttnggagt gcaaacactg nggtggtatgg agcatangng ttacagntga atnccgagaa 240
 aattcncata nannanattt 260

<210> 583
 <211> 305
 <212> DNA
 <213> Glycine max

<400> 583

cgatgctaac tcttcaagct tcgtctcgta aagaaaatgc gaaggctcaa tagagagaac 60
 tcaattgaat catcaaataa ggacagtgat ttgcgcgttg atccattcca cgccttacat 120
 tttcaggctc aatgccacgg cagcatccat caccataact tataatgtgac ccttttctat 180
 cttactaaat acccaattcc ttctctaatt cacagtctac aggtctgac tctatggctg 240
 ttgcaattaa tgtatctcgg ttgaaagca tacctattgc tctctctgat ccaattttta 300
 gagtt 305

<210> 584
 <211> 247
 <212> DNA
 <213> Glycine max

<400> 584

cccacgcgtc cgtacggctg caagaagacg acagaagggg agtaatacag acagcaacat 60
 ggcgccagcg gttattctca aaactaccat ctctcttttg gaggcgtcgt cgtcctcaac 120
 accctgtgat ggcagactca aactctcgc tagacacgtc cttccacaaa tggcttctca 180
 tgacatgac tgagaatctt caacctacgc atctgaatcc gtcacatc atctcgttcg 240
 tactccc 247

<210> 585
 <211> 385

<212> DNA
<213> Glycine max

<223> unsure at all n locations
<400> 585

attaatagta atacaaacag cagcatgctc ccacccgtta ttctcaaaac taccaccgtg 60
tttgtggaat ctttcttctc gtcaccaccc tgtgatcgca gactcaaacac tctcgctaga 120
cacttccttt cgcaaattggc ttctcagcag agcatctccg cttctacaac ctccgcttct 180
gattccgtct tcaatcacct cgttcgtgct cccgaagatc ctatcctcgg ggtaactgtc 240
gcttataaca aagatccaag tccagttaag ctcaacttgg gagttgggtg ttaccgaaact 300
gaggaaggaa aacctcttgt ttttgatgta gtgaggcgag ttgaacagnc actcataaat 360
gacgtgtcac gcaacaagga atata 385

<210> 586
<211> 455
<212> DNA
<213> Glycine max

<223> unsure at all n locations
<400> 586

ctctccctct ctgttcgcac tctgtctttc cctgtttcc gcgtcactga gtcattggcg 60
ttcgcaactc gtcaccggc caattcctcc gccgcagctc cgtcgccgga gcaaggctca 120
tgtcttcttc gtctcatgg ttccggagca tcgagccgc tccaaggat cctatcctcg 180
gagtcactga agctttcctc gccgatcaga gtccaaacaa agtcaacgtc ggagtgggtg 240
cgtatcgca tgaccacgga aaacctgtgg ttttggaatg tgtagagaa gcagagagga 300
gggttgccgg aagtcaattc atggagtatc ttcccatggg tggaagcata aaaatgatag 360
aagaatcgct gaagctggca tttggagaca actctgagtt catcaaggat aaaagaatag 420
ctgcagtga tgctntatct gngactgggtg catgt 455

<210> 587
<211> 360
<212> DNA
<213> Glycine max

<400> 587

gcgagcggcc gccctttttt tttttttttt tttttttttt tttttttttt ggggaaacgg 60

aataaaaaatg ttataatgct aaatctctgg atggagcccg gtaggcagaa aagtttcctt 120
 taaaaatctc acatcaaata aaaggtttca ttgttgatgt tgacaattat taaacaaaaa 180
 taatggaagt tctcctatag ggactaggga gcatgttgaa aactgttgtc aacatgtttt 240
 agacaactcg ggttacagct gcatgtatcg cattcgccag aagtgggaca gttttggaac 300
 tcagaccagc catgctaate ctcccatcaa atgtcatgta tatatggaac tctttaatca 360

<210> 588
 <211> 366
 <212> DNA
 <213> Glycine max
 <400> 588

ctgcattgca tgtatctgca tcgagaatga tgttctgggt gtcactgatc aagtctatga 60
 caagtgggct tttgatatgg agcacatate gatggcttat ttgcctgtaa tgttcgaaag 120
 gacagtgaca ttgaactcct tggggaagac attctcctta acacgatgga agattgggtg 180
 ggccatagca cccgcacact tatcatgggg agtgctacag gcacacgctt tgctgacttt 240
 cgcaactgcc cattcttttc agagtgctgc tgcagcatct atgagagcac cagactctta 300
 ctatgtagag ctgaagaggg attatatggc atatagagct attttgattg aaggattgaa 360
 ggctgt 366

<210> 589
 <211> 413
 <212> DNA
 <213> Glycine max
 <400> 589

cttttgtgtt ctgttctgtt ctgttacatc tcgtgaatcg tttacaactt ctttaaccgtt 60
 ttctgttgca gatggottct tcgtttctat ccgcagcttc gcacgctgtc tcaccctctt 120
 gttctctgtc caccacgcac aagggaagc ccatgcttgg aggcaacact ttgagatttc 180
 acaaaggacc caattccttc tctagttcaa ggtctagagg tcggatctct atggctgttg 240
 cagttaatgt atctcggttt gaaggcatac ctatggctcc tcctgatcca attctcgag 300
 tttccgaggc gtttaaggca gacaatagt atgtcaagct caatcttgga gttggggcat 360
 acagaacaga agaactacag ccatatgtgc ttaatgttgt taagaaggca gag 413

<210> 590
 <211> 401
 <212> DNA
 <213> Glycine max

<400> 590

cttttgtgta tcgttctgtt ctgttacatc tcgtgaatcg gttacaactt cttaacogtt 60
 ttctgttgca gatggcttct tcgtttctat ccgcagcttc gcaogctgtc tcaccctctt 120
 gttctctgtc caccacgcac aagggaaagc ccatgcttgg aggcaacact ttgagatttc 180
 acaaaggacc caattccttc tctagttcaa ggtctagagg tcggatctct atggctgttg 240
 cagttaatgt atctcggttt gaaggcatac ctatggctcc tctgatcca attctcggag 300
 tttccgaggc gtttaaggca gacaatagtg atgtcaagct caatcttgga gttggggcat 360
 acagaacaga agaactacag ccatatgtgc ttaatgttgt t 401

<210> 591
 <211> 331
 <212> DNA
 <213> Glycine max

<400> 591

gatcagttct gttctgttac atctcgtgaa tgattttaca ctaattaacc ggtgtctgtt 60
 gcagatggct tcttcgtttc tatcgcagc ttgcacogct gtctcaccct cttgatctct 120
 gtccaccacg cacaagggaa agcccatgct tggaggcaac actttgagat ttcacaaagg 180
 acccaattcc ttctctagtt caaggtctag aggtcggatc tctatggctg ttgcagataa 240
 tgtatctcgg tttgaaggca tacctatggc tctctctgat ccaattctcg gagtttccga 300
 agcgtttaag catacaatat tgatgtcaag c 331

<210> 592
 <211> 349
 <212> DNA
 <213> Glycine max

<400> 592

acggacgcga gaagacgaca gaaggggact actacttgat cacatcgtat tctctatgct 60
 attccgatta atcaatcata gatagatcca ttattcatag ttaaataa taactgttgt 120

gttacatctc gtgaattggtt acaactgctt aaccattttc tattgcagat ggcttcgtcg 180
 gttctctccg cagcttcaca ctctgtctca tctcatgtt ctctgtccac cagcacaag 240
 ggaaagccca tgattagaga caacactttg ggattccaca gaggacccaa ttccttctct 300
 agttcaaggt ctaaagggtcg gatctctatg gctgttgcag ttaacgttt 349

<210> 593
 <211> 440
 <212> DNA
 <213> Glycine max
 <223> unsure at all n locations
 <400> 593

cggacgcgtg ggttccgcaa atggcttctc acgacagcat ctccgcttct ccaacctccg 60
 gttctgattc cgtgttcaat cacctcgttc gtgctcccgag agatcctatc ctcggggtaa 120
 ctgtcgctta taacaaagat ccaagtcag ttaagctcaa cttgggagtt ggtgcttacc 180
 gaactgagga aggaaaacct cttgttttga atgtagtgag gcgagttgaa cagcaactca 240
 taaatgacgt gtcacgcaac atggaatata ttccgatcgt tgggcttgct gattttaata 300
 aattgagtgc taagcttatt tttggggctg acagccctgc tattcaagac aacagggtta 360
 ccactgttca atgctngtct ggaactgggt ctttaagagt tgggggtgaa attttggcta 420
 aacactatca ccaacggact 440

<210> 594
 <211> 410
 <212> DNA
 <213> Glycine max
 <400> 594

cttccttccg caaatggctt ctacgacag catctccgct tctccaacct ccgcttctga 60
 ttccgtcttc aatcacctcg ttcggtctcc cgaagatcct atcctcgggg taactgtcgc 120
 ttagaagaaa gatccaagtc cagttaagct caacttgga gttggtgctt accgaactga 180
 ggaaggaaaa cctcttgttt tgaatgtagt gaggcgagtt gaacagcaac tcataaatga 240
 cgtgtcacgc aacaaggaat atattccgat cgttgggctt gctgatttta ataaattgag 300
 tgctaagctt atttttgggg ctgacagccc tgctattcaa gacaacaggg ttaccactgt 360

tcaatgcttg tctggaactg gttctttaac actttgcggt gaatttttgg

410

<210> 595

<211> 389

<212> DNA

<213> Glycine max

<223> unsure at all n locations

<400> 595

gtaattcgtg gaggggaatac ttttccatta cgcacgcact ttaattacag acgagacaat 60

tataattaat agtaatacag acagcagcat gcgcccaccg gttattctca aaactacgac 120

ctctcttttg gattcttctt cttcttcacc accctgtgat cgcagactca acactctcgc 180

tagacacttc cttccgcata tggcttctca cgacagcatt tccgcacgc caaactccgc 240

ttctggatcc gtcttcaagc acctcgtaag tgctcccgaa gatcctatcc tcggggtaac 300

tgctcgcttac aacaaagatc cangtccagt taagctcaac ttgggagttg gtgcataccg 360

aactgaggaa tgaaaacctc ttgttttga 389

<210> 596

<211> 427

<212> DNA

<213> Glycine max

<223> unsure at all n locations

<400> 596

cccacgcgtc cgcccacgcg tccgcttttc tattctatta attacaggga ccatcaaaac 60

caaaaaagcc aattaatagt tattcttttg gattcttatt gttcatcgca gactcaaacac 120

tctctccaga cacttccttc atcaaatggc ttctcaccgac ggcacctccg ctgcttcttc 180

agattccgtc ttcaatcacc tcgttcgtgc tcccgaagat cctatcctcg gggtaactgt 240

tgcttataac aaagatccaa gtccagttaa gctcaacttg ggagttggtg cttaccgaac 300

tgaggaagga aaacctcttg ttttgaatgt agtgaggcga gttgagcagc aactcataaa 360

tgacgtgtca cgcaacangg aatatattcc gattgttggg ctagctgatt ttaataaatt 420

gagtgtc 427

<210> 597

<211> 405

<212> DNA

<213> Glycine max

<400> 597

taaattatgt gttcataaat tatgcaccag caactcacac aagttttgca tttttaccag 60
gaatgtggga cagaactctt actgtgaatg gattttccaa ggcctttgca atgactgggt 120
ggcggcttgg atatattgct ggtccaaaac attttgttgc agcatgtgga aagatccaaa 180
gtcagttcac ttcagggggc agtagtatag ctcaaaaagc tgcagttgct gcattaggac 240
taggccatgc tgggtggggag gcagtttcta ccatggtgaa agcatttagg gagcgaagg 300
atttcttggg aaaaagtgtt agagaaatag atgggtgtcaa gatattctgaa ccccaggagg 360
cattttatct attccttgat ttcagcttct attatggaag agaag 405

<210> 598

<211> 251

<212> DNA

<213> Zea mays

<400> 598

ctcaactcca tgggtgctcg caacaactcg gagaacgtgc tgctcccgt caacgagccg 60
gtgctagtaa ccaagcgccg cagccagata caaacgttcc tggaccacca cggcggcccc 120
ggcgtgcagc acatggcgct ggccagcgac gacgtgctaa ggacgctgag ggagtgcacg 180
ctagctcggc catgggcggc ttcgagttca atggcgctc caacatcgga ttattgacgg 240
cgtgtagcgg c 251

<210> 599

<211> 115

<212> DNA

<213> Zea mays

<400> 599

agcgctggcc agcgacgacg tgctcaggac gctgaggag atgcaggcg gctcggccat 60
ggcgggcttc gagttcatgg cgctccccc atccgactac tacgacggcg tgagg 115

<210> 600

<211> 368

<212> DNA

<213> Zea mays

<400> 600

aagtcacccc agccgcaaac tgcagctctg caagctacag aggccaccac gagtccacga 60
cgccacgccc tccgagagaa agagaaagag aaaaccaaag cacgataatg ccccgacccc 120
ccacagccgc cgcagccggc gccgcccgtg cgccggcatc agcagcggag caggcggcgt 180
tccgcctcgt gggccaccgc aacttcgtcc gcttcaacc gcgtccgac cgcttccaca 240
cgctcgcgtt ccaccacgtg gagctctggt gcgccgacgc ggctccgcc gcgggcccgt 300
tctccttcgg cctgggcgcg ccgctcgccg cgcgctccga cctctccacg ggcaactccg 360
cgcacgcg 368

<210> 601

<211> 259

<212> DNA

<213> Glycine max

<223> unsure at all n locations

<400> 601

accgtgccgc tgatgtgttg accgttgacc agattaagca gtgtgaggag cttgggattc 60
ttgttgacag anatgatcag ggcaactctgc ttcagatttt caccaagcct gttggggaca 120
ggccantcga tattcataga gataattcag aggatcgggt gcatggtgga ngatgangaa 180
gggaaggtgt acatccangg tncatgtggg ggttttggga aaggcanttt tctgagcttt 240
caaatccatt gaagatatg 259

<210> 602

<211> 269

<212> DNA

<213> Glycine max

<400> 602

gctgcctcct ccgcctccat tcccagtttc gacgccgcca cctgccttgc cttcgtgcc 60
aaacacggct tcggcgtccg cgccatcgcc ttggaagtcg ccgacgcgga agccgctttc 120
agcgcacagc tcgcgaaagg agccgagccg gcgtcgccgc cggttctcgt cgacgatcgc 180
accggcttcg cggaggtgcg cctctacggc gacgtggtgc tccgctacgt cagctacaag 240
gacgccgcgc catagcccca cacgcagat 269

<210> 603
 <211> 268
 <212> DNA
 <213> Glycine max

<400> 603

cttgggattc ttgttgacag agatgatcag ggcactctgc ttcagatttt caccaagcct 60
 gttggggaca ggccaacgat attcatagag ataattcaga ggatcgggtg catggtggag 120
 gatgaggaag ggaaggtgta ccagaagggt gcatgtgggg gttttgggaa aggcaatttt 180
 tctgagcttt tcaaatccat tgaagaatat gagaagactt tggaagctaa aagaaccgcg 240
 taagcacatt ggaagaacac aaatactc 268

<210> 604
 <211> 257
 <212> DNA
 <213> Glycine max

<400> 604

gttgacagag atgatcaggg cactctgctt cagattttca ccaagcctgt tggggacagg 60
 ccaacgatat tcatagagat aattcagagg atcgggtgca tgggtggagga tgaggaaggg 120
 aaggtgtacc agaagggtgc atgtgggggt tttgggaaag gcaatttttc tgagcttttc 180
 aaatccattg aagaatatga gaagactttg gaagctaaaa gaaccgcgta agcacattgg 240
 aagaacacaa atactcc 257

<210> 605
 <211> 265
 <212> DNA
 <213> Glycine max

<400> 605

taagcagtgt gaggagcttg ggattottgt tgacagagat gatcagggca ctctgcttca 60
 gattttcacc aagcctgttg gggacagggc aacgatattc atacagataa ttcagaggat 120
 ccggtgcatg gtggaggatg acgaacggaa cgtgtagcag aacggtgcat gtggggggtt 180
 tgggaaaggc aatttttctg agcttttcaa atccattgga gaatatgaga acacttttgt 240
 agctaaaaga accgcgtaag cacat 265

<210> 606
 <211> 473
 <212> DNA
 <213> Glycine max

<400> 606

accggcttcg cggaggtgcg cctctacggc gacgtggtgc tccgctacgt cagctacaag 60
 gacgccgcgc cgcattgcgc acacgcagat ccgtcgcggt ggttcctgcc gggattcgag 120
 gcgcggcggt cgtcgtcttc gtttcgggag ctggactacg ggatccggcg gctggaccac 180
 gccgtcggga acgttcggga gctggcgccg gcggtgaggt acctgaaagg cttcagcgga 240
 ttccacgagt tcgaggagtt caccgtggag gacgtgggaa cgagcgagag cgggttgaac 300
 tcggtggttc tggcgaacaa ctccgagacg gtgttgctgc cgctgaacga gccggtttac 360
 ggaacgaaga ggaagagcca gattgagacg tatttggaac acagcgaatg tgctggtgtg 420
 cagcaccttg cgcttggttac tcacgacatc ttcaccacac tgagagagat gag 473

<210> 607
 <211> 441
 <212> DNA
 <213> Glycine max

<223> unsure at all n locations
 <400> 607

gccaataccc atgtgcaacg aaattcaagc ccaagcccaa gcccaagccc aagcccaacc 60
 tgggttgaag ctgcgcggtt gcaagaactt cgccgaacc aatcctaagt cggaccgctt 120
 tcaagtcaac cgcttcacc acatcgagtt ctggtgcacc gatgccacca acgcctctcg 180
 ccgattctct tggggacttg gaatgcctat tgtggcaaaa tctgatctct ccaccggaaa 240
 ccaaatccac gcctcctacc tctccgctc cggcgacctc tccttcctct tctccgctcc 300
 ttactctccc tctctctccg ccggctcctc cgctgcctcc tccgcctcca ttcccagttt 360
 cgacgccgnc acctgccttg ccttcgctgc caaacacggc ttcggcgctcc gcgccatcgc 420
 cttggaagtc gccgacgcgg a 441

<210> 608
 <211> 304
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
<400> 608

gacntggctg tccggcgccc attttcagct cctgatctt ggcccaattg gtgagcatgg 60
nntggcttcg ccgagggatt tcctttcccc gacagcatgg tttgagcagg agcaccaccc 120
tggatacaca atagtgcaca agtatggtgg cgagctgttc agcgccacgc aggatttctc 180
tccattcaac gtggtcgcgt ggcattggga ttatgtccct tacaagtatg atctgagtaa 240
gttctgtcca ttcaacaccg tcctcttggg tatggcgacc gtcagtgaac acagttctaa 300
ctgc 304

<210> 609
<211> 266
<212> DNA
<213> Zea mays

<400> 609
gcgagatcgt cgtgatccct caaggtctcc gatttgctgt cgacttgccg gatggccct 60
cgcgtggcta tgtctctgag atcttcggcg cccattttca gctccctgat cttggcccaa 120
ttggtgccaa tggcttggtc tcgccgaggg atttcctttc cccgacagca tggtttgagc 180
aggagcacca ccctggatac acaatagtgc acaagtatgg tggcgagctg ttcagcgcca 240
cgcaggattt ctctccattc aacgtg 266

<210> 610
<211> 282
<212> DNA
<213> Zea mays

<400> 610
gtcccttaca agtatgatct gagtaagttc tgtccattca acaccgtcct cttggatcat 60
ggcgaccgct cagtgaacac agttctaact gcgccaactg ataagcctgg cgtcgcgttg 120
cttgattttg taatattccc acccagatgg ctggttgctg agaatacatt ccgcccaccc 180
tactaccacc gcaactgcat gagcgaattc atgggcctca tctatgggat gtacgaggct 240
aaggccgatg gttttcttcc tgggtggcgcc agcttcacag ct 282

<210> 611
<211> 272

<212> DNA
<213> Zea mays

<400> 611

ctacaccgtc tgcggcgccg gcagctcatg cctccgacac ggatacgcca tccacatgta 60
tgctgctaac aagcccatgg atggatgctc cttgtgcaat gcggacggtg acttcctcat 120
tgttccccag caaggaaggt tattatcaca accgagtgcg gaaggctgct ggtttcaccc 180
ggcgagatcg tcgtgatccc tcaaggtctc cgatttgctg tcgacttgcc ggatggcccc 240
tcgcgtggct atgtctctga gatcttcggc gc 272

<210> 612
<211> 253
<212> DNA
<213> Zea mays

<400> 612

ctacaccgtc tgcggcgccg gcagctcatg cctccgacac ggatacgcca tccacatgta 60
tgctgctaac aagcccatgg atggatgctc cttgtgcaat gcggacggtg acttcctcat 120
tgttccccag caaggaaggt tttatcaca accgagtgcg gaaggctgct ggtttcaccc 180
ggcgagatcg tcgtgatccc tcaaggtctc cgatttgctg tcgacttgcc ggatggcccc 240
tcgcgtggct atg 253

<210> 613
<211> 295
<212> DNA
<213> Zea mays

<400> 613

ctcgacaagc aatggccatg gaggaggagc agacaccacc cgagctgcgc tacctctcgg 60
gcctgggcaa caccttcacg tcggaggcgg tgccggggtc gctccccgtg gggcagaaca 120
accgctagt gtgcccgctg ggactctacg ccgagcagct ctccggcacc tccttcacca 180
ccccgcgcgc ccggaacctg cgcacgtggc tgtaccgat caagccgtcg gtgacccacg 240
aaccottcta tccgcggaac cccaccaacg agcgcctcgt cggcgagtgc gaccg 295

<210> 614
<211> 293

<212> DNA

<213> Zea mays

<400> 614

ccgttgccg cttgccccgt ccgtgcggtcc atctgtttcc accttggatc ctcgacaagc 60
aatggccatg gaggaggagc agacaccacc cgagctgcgc tacctctcgg gcctggggca 120
acaccttcac gtcggacgcg gtgccgggggt cgctccccga ggggcagaac aaccgctag 180
tgtgcccgt gggactctac gccgagcagc tctccggcac ctcttcacc acaccgcgcg 240
cccggaacct gcgcacgtgg ctgtaccgga tcaagccgtc ggtgaccac gaa 293

<210> 615

<211> 449

<212> DNA

<213> Zea mays

<400> 615

cggacgcgtg ggattgtttt gtcacaccga gaaccatac ttacctaac tgttgtgtgtg 60
tgtgcagggtg ccaatggctt ggcttcgccg agggatttcc tttccccgac agcatggttt 120
gagcaggagc accaccctgg atacacaata gtgcacaagt atgggtggcga gctgttcagc 180
gccacgcagg atttctctcc attcaacgtg gtcgcgtggc atgggaatta tgtcccttac 240
aagggtgtgtt gtatgccatt gtacacctgt ctgccattga gatgtgtgtc gctgttcact 300
ccacccccctt ctctttcagt atgatctgag taagtctgtt ccattcaaca ccgtcctctt 360
ggatcatggc gaccgcgcag tgaacacagt tctaactgcg ccaactgata agcctggcgt 420
cgcgttgctt gatatttgtaa tattccac 449

<210> 616

<211> 212

<212> DNA

<213> Glycine max

<400> 616

atgaggccaa ggctgatgga tttcttcccg gtgggtgcaag tctccataat tgtatgactc 60
cccatgggtc tgatacaaag tcatatgagg ctaccattgc acgaggaaat gatggaggac 120
cttgtaagat cacggacaca atggctttta tgtttgaatc gagtttgata ccccgatatca 180
gtcaatgggc cctggaatca ccgttcttgg at 212

<210> 617
 <211> 269
 <212> DNA
 <213> Glycine max

<400> 617

cgacggtggc gagttcgtgt acctttccgg gttcggcaac cacttctcct ccgaggccct 60
 cgccggagct ctgccggtgg cgcagaacag cccctcgtc tgcccgtagc gcctctacgc 120
 cgagcaaatac tctggcacct ccttcacctc cctcgcgaac cgcaacctct tcagttgggt 180
 ttatcggatc aagccatcgg tgactcacga accgttcaag cctagggtag ctggtaatgg 240
 cagaattttg agtgagttaa acaactcca 269

<210> 618
 <211> 269
 <212> DNA
 <213> Glycine max

<400> 618

ctttgtgttc actctttctc ttttttggtg ttagttcggg gaatcatgga gaacccaatac 60
 gacggtggcg agttcgtgta cctttccggg ttccggcaacc acttctcctc cgaggccctc 120
 gccggagctc tgccggtggc gcagaacagc cccctcgtct gcccgtagcg cctctacgcc 180
 gagcaaatac ctggcacctc cttcacctcc cctcgcgaacc gcaacctctt cagttgggtt 240
 tatcggatca agccatcggg gactcacga 269

<210> 619
 <211> 285
 <212> DNA
 <213> Glycine max

<400> 619

attcggctcg agacaaatac taccatttcg gtgaatcatg gcgaacccaa tcgacggtgg 60
 cgagttcgag tgcctttccg ggttcggcaa ccacttctcc tccgaggccc tcgccggagc 120
 tctgccggcg gcgcagaaca gccccctcgt ctgcccgtag ggactatacg ccgagcaaat 180
 ctccggcacc tccttcactt ctccctcgaac ccgcaacctc ttcagttggg ttatcgggat 240
 caaacatca gtgactcacg aaccgttcaa gccaaagagta ccggg 285

<210> 620
 <211> 255
 <212> DNA
 <213> Glycine max

<223> unsure at all n locations
 <400> 620

gngatttaag aagttcaatt ctttactcaa actttgtgtt cactctttct cttttttggt 60
 gttagttcgg tgaatcatgg agaaccacaat cgacggtggc gagttcgtgt acctttccgg 120
 gttcggcaac cacttctctc cgaggccctc gccggagctc tgccggtggc gcagaacagc 180
 cccctcgtct gcccgtagcg cctctacgcc gagcaaactc ctggcacctc cttcacctcc 240
 cctcgcaacc gcaac 255

<210> 621
 <211> 257
 <212> DNA
 <213> Glycine max

<400> 621

aattatgttc catatatgta tgatttaaac aaattctgcc cttataatac agttctgttt 60
 gatcatagt atccatcaat caatactgtg ttgacagcac caactgataa acctggagtg 120
 gcattgcttg attttgtcat tttcccaccc agatggctgg ttgctgagca tactttccgg 180
 cctccatatt atcatcgcaa ttgcatgagt gaatttatgg gcctcattca tgggtggttat 240
 gaggccaagg ctgatgg 257

<210> 622
 <211> 225
 <212> DNA
 <213> Zea mays

<400> 622

cgagcccatc gccgtcctcg ccggggagcg gctgctctcg ctctccttcc accacatggc 60
 cagcgtcggg tectaccctc cggacgtgga cccggagaag cccccgccc gcgtcgtccg 120
 agccattggg gagctcgcgc gctgcatcgg atccgaggga ctcgtcgccg gccaggttgt 180
 cgatctcgag atgacgggca catcagagac ggtgcccctc gaacg 225

<210> 623
 <211> 337
 <212> DNA
 <213> Zea mays

<400> 623

gtgccggcag cgactattcc tgatgccacg acgacaagcg tcaactgagcg gacttcgggt 60
 tcatctcttt tagaggttgt atcggaggac ttgctcagcc ttaacaacaa tctcaaactg 120
 cttgttggtg cagaaaatcc agtttttagtt tctgcagctg aacaaatttt tgggtgctggt 180
 ggaaaaagat taaggccagc attgggttttc ctggtgtcta gagcaactgc tgaattagct 240
 ggtttgtcgg agttaactgc agaacatcga cgcttggcag agattatcga gatgattcac 300
 actgcgagtt taatacatga tgatgtcata gatgata 337

<210> 624
 <211> 350
 <212> DNA
 <213> Zea mays

<400> 624

caagaccgcc gcattgctcg aggccctcggg tgtgattggg gcgatcatcg gaggcggcgc 60
 tgacgagcag atcgagaggg tgtggaagta cgcgaggctg atcgggctgc tgttccaggt 120
 ggtcgacgac atactcgatg tcaccaagtc gtcagaggag ctcggaaga cagcggggaa 180
 ggacctggca agcgacaaaa cgacgtaccc taagctgctg gggctagaaa agtcgcggga 240
 gttcgcggag gagttgctct ctgatgccgt atagcagctt gcttgcttcg acaaggagaa 300
 ggcagegcct ctgttgcatc tggccaacta tatcgtccat atgcacaact 350

<210> 625
 <211> 245
 <212> DNA
 <213> Glycine max

<400> 625

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 gatctgctaa ctctcaataa aaatcttcag tcgattgtag gagcagaaaa tccagttttg 120
 atgtctgcag ctgagcagat ttttagtgct ggtggaaaga ggatgagacc agctttggtg 180

ttcttggtgt caagggcgac tgcagagtta cttggcttga aggaacttac tgcaaagcat 240
cgacg 245

<210> 626
<211> 273
<212> DNA
<213> Glycine max

<400> 626

gctcgagcac ttgtcccgcc acaagccctt ctgtaccaat cgatcttgct aactccccaa 60
tcgcgcaaac cacgcgtgac gccgatacgc cctccgtgga caccgccacg tgctcaaacg 120
cgaaggcgag aactgccacg tcctcgtcct agaccttggt gttggtcggc tttccgtggt 180
agaggtcgtc gttgtccata tagggcaggt tgctcgtggat gagcgccatg gtgccgttga 240
cgagctcgca tgtggtgatg cagagcacgg ggc 273

<210> 627
<211> 270
<212> DNA
<213> Glycine max

<400> 627

cagagaaatt tatttgagt gttccccggt gagaaaacag ggtatccaat gttttcactt 60
ttaattttgc ctataagcaa tgtaattggt taatgcaaac aaggagccg cctttggagg 120
atcgaagcca gacaattggt ccttggcatc cttaacaat tcttgagcaa attcctttga 180
cttatctatc cccaatagct tgggataagt aaccttatca gccaccaaatt cttccccgc 240
cgtcttcccc aattcctccg acgacttcgt 270